DOCUMENT RESUME

ED 163 168 08 CE 017 654

TITLE	An Exemplary Project to Demonstrate Transporting Career Education Techniques in Kansas and to Provide a Career Education Preservice Component to a Teacher Education Program. Final Report.
INSTITUTION	Kansas State Dept. of Education, Topeka.
SPONS AGENCY	Office of Career Education (DHEW/OE), Washington, D.C.
BUREAU NO	554AH50323
PUB DATE	76
GRANT	G007503905
NOTE	263p.; Not available in hard copy due to faint print in original document; For related documents see ED 114 586 and ED 120 411
EDRS PRICE	MF-$0.83 Plus Postage. HC Not Available from EDRS.
DESCRIPTORS	*Career Education; *Faculty Development; Information Dissemination; Inservice Teacher Education; *Needs Assessment; Parent Attitudes; Program Attitudes; Program Development; *Program Effectiveness; Program Evaluation; Program Planning; Questionnaires; Resource Materials; Student Attitudes; Tables (Data); *Teacher Attitudes; *Teacher Education
IDENTIFIERS	Education Amendments 1974; Kansas

ABSTRACT

A project was conducted (1) to determine the effectiveness of using career education practitioners from the field in providing prospective teachers with an understanding of career education concepts relative to teaching responsibilities and (2) to demonstrate and compare the effectiveness of delivering career education activities through the use of five different organizational bases. Before the implementation of the project, pretest instruments were administered to teachers, student teachers, students, and parents to determine the level of understanding of career education among these different groups and to determine the effectiveness of the project activities. A posttest was later administered after the completion of one year's activities. The major activities accomplished by the project were the development and dissemination of a planning and implementation guide; numerous workshops and in-service meetings; a career education newsletter; a search file; and a collection of resource materials. A comparison of the test results between experimental (project participants) and control (nonparticipants) groups revealed no significant differences except in the area of teachers' attitudes toward career education. (Also included are individual region reports, audit reports, and assessment data from all regions on each instrument.) (Author/BM)

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I.D. #44

FINAL REPORT

Project No. 55-AH50823

Grant No. G007503905

Career Education

AN EXEMPLARY PROJECT TO DEMONSTRATE TRANSPORTING CAREER EDUCATION TECHNIQUES IN KANSAS AND TO PROVIDE A CAREER EDUCATION PRESERVICE COMPONENT TO A TEACHER EDUCATION PROGRAM

Conducted under Section 402 and 406 of P. L. 93-380

Category: Incremental

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The Project reported herein was supported by a grant from Career Education Programs, U. S. Office of Education. The opinions expressed in this publication do not necessarily represent policies or the positions of the Office of Education and no official endorsement should be inferred.

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July 1, 1975, to June 30, 1976

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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ABSTRACT

An Exemplary Project to Demonstrate Transporting Career Education Techniques in Kansas and to Provide a Career Education Pre-Service Component to a Teacher Education Program, State Department of Education, Topeka, Kansas, for 1975-76, based its career education activities on two objectives 1) to determine the effectiveness of using career education practitioners from the field in providing prospective teachers with an understanding of career education concepts as related to teaching responsibilities and 2) to demonstrate and compare the effectiveness of delivering career education activities through the use of five different organizational bases.

The two overall objectives of the project were broken down to seven process objectives:

1. Conduct an assessment of career education programs in five regions.
2. Develop a guide for planning and implementing career education.
3. Conduct workshops and in-service meetings for facilitators and teachers of career education.
4. Collect and organize curriculum and program materials for statewide usage.
5. Write and publish newsletters to communicate career education news to the field.
6. Determine the best methods of integrating career education into the schools' curricula.
7. Determine the best education materials and activities for each level according to unified school district, community college, area vocational-technical schools, educational service center, and vocational planning center.

There were two performance objectives in addition to the seven product outcomes.

1. Determine the level of understanding of career education among the different groups of teachers, student-teachers, students and parents.
2. Determine the effectiveness of using successful career education practitioners from the field in providing prospective teachers with an understanding of career education concepts as related to teaching responsibilities.

The evaluation design for these objectives was a pretest of teachers, student teachers, students, and parents before the implementation project activities and then a posttest after completion of the year's activities. A random-sample, classroom cluster design was developed, using the non-parametric techniques of chi square and Mann-Whitney U to determine significant differences in the control group and experimental group.

The population chosen for the administration of the instrument was from five Kansas regions which serve as the organizational bases for the administration of career education programs: Region I, Colby; Region II, Beloit; Region III, Wichita; Region IV, Erie; and Region V, Kansas City. The student teachers of the four-year colleges in Pittsburg and Hays were included in the population.

The Olympus Career Education Needs Instrument which consists of three level tests -- for students, grades 4-6; for students, grades 7-12; for teaching and administrators -- was administered in all regions. The Evaluative Research Associates' Non-Verbal Career Education Test was given to kindergarten through third grade students in all regions, whereas the Jarmer Questionnaire was administered in only one region -- Colby.

The process objectives resulted in the following: 1) A guide for planning and implementing career education was developed and disseminated both within and out of state. The response to the guide was very favorable. 2) A total of twenty workshops and in-service meetings were held across the state to familiarize teachers and facilitators with the latest materials in career education, planning procedures, and classroom demonstrations. 3) Additional career education information was disseminated in three installments of Comment, a career education newsletter which included up to sixteen pages of news items. 4) A search file which includes an occupational library, testing materials, career guidance resources, curriculum guides, and directories was established for across-the-state usage. 5) The best materials for each level of the curriculum and type of institution - area vocational-technical school, community college, etc. -- were identified. The materials in the collection were prioritized and marked according to their utility.

Statistical analyses did not reveal significance between the experimental and control groups that had been expected. The greatest significant difference between the experimental and control groups occurred on the teacher portion of the assessment, implying a change in teacher attitude due to the project activities. The scores of the students in grades 4-6 and 7-12 indicated a trend toward positive attitudes in career development. There was no significant difference between the experimental and control groups of students in K-3. (The test given to the K-3 group of students received extreme criticism from those who administered the test.) From the data analyses, the project can document the change in only teachers within the duration of the project.

A review of the raw data by career education personnel revealed various observations about teachers, student teachers, and students.

Teacher

1) The majority of teachers feel that schools will need additional funding to continue career education.
2) The majority of teachers feel that choosing appropriate career goals is not a natural outgrowth of the present school program.
3) The majority of teachers feel that to effectively teach career education concepts requires a change in the teacher methods of instruction.

Student Teachers

1) The majority of student teachers feel that career information should be provided to all students regardless of their career goals.
2) The majority of student teachers feel that classroom instruction is a valuable vehicle for helping students gain an appreciation of the value and importance of work.
3) The majority of student teachers feel that "hands on" work experience is essential for effective career exploration.

Students, 4-6 grades

1) The majority of students feel that parents do not decide what occupations their children will have.
2) The majority of students feel that every kind of work is important.
3) The majority of students feel that subjects studied in school will help them get a job.

Students, 7-12 grades

1) The majority of students feel that schools are instrumental in helping them decide upon careers.
2) The majority of students feel that success in a career depends on the attitude a person might have toward work in that career.
3) The majority of students feel that it is difficult to learn an occupation without having actual work experience in that occupation.

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INTRODUCTION AND FORMAT

The primary goal of Project Career Education has been to facilitate the implementation of career education in all Kansas schools and to prorate a model for the development of a unified curriculum plan for Career Education. The institutions which have participated in the project are an education service center in Region I, Colby; a vocational-technical school in Region II, Beloit; an urban school in Wichita, Region III; a vocational education service center in Erie, Region IV: a community college in Kansas City, Region V; two colleges in Hays and Pittsburg; and State Department of Education. The intent of Project Career Education has been to bring career education as an integral part of the pre-school-through-life education into focus in the educational system of Kansas. With articulation of career education programs into the schools' curricula, it is hoped to balance the traditional vocational, general, and college preparation components of education, thus maximizing student opportunities for self-actualization, forming desirable attitudes toward employment, and developing salable skills and knowledge.

This intent has been operationalized into a consortium approach whereby participating school districts, vocational-technical schools, and community colleges joined efforts to develop and evaluate activities and materials for appropriate career education components as well as to direct teachers in the relationship of career education and teaching responsibilities. The role of the federal director in the Kansas State Department of Education has been primarily a coordinating and fiscal management one with a concurrent effort to assess career education needs across the state.

The format of this final report reflects the consortium operational structure adopted for the project. There is a section report for each region as well as a descriptive report of the director's office in the state

education agency. The region reports are written by the project facilitator at each region while the descriptive report is authored by the project director. Additionally, there is a section in which materials relative to the major accomplishments of the objectives are presented.

It should be pointed out that a previous report descriptive of project activities has been submitted and that this one is intended to supplement and articulate with it. A progress report for the period July 1, 1975, to January 1, 1976, must be considered integratively if one is to grasp the full scope of Project Career Education in Kansas.

KANSAS STATE DEPARTMENT OF EDUCATION

Mrs. Hazel Rockhold, Project Director

BACKGROUND

As early as 1970, Kansas schools were introduced to career education through a federal project. The thrust of the federal project was to implement career education into a rural, suburban, and urban setting of Kansas.

The rural component of the project, located at Clay Center school district, developed elementary awareness activities for grades kindergarten through sixth grade and exposed grades seven through nine to the World of Work exploration experiences. The program currently serves 805 elementary, 438 junior high, and 635 high school students. The suburban component, located at Lawrence school district, established the goal of infusing career education into the curriculum. Four thousand teachers and eight thousand students participated in reaching this goal. The urban setting, located in the Kansas City school district, in-serviced nine hundred teachers and developed resource guides for grades kindergarten through third and four through six to help students become more aware of viable career interests and opportunities.

This initial effort convinced the Kansas educational leaders that career development is a major aspect of growth and learning process which must be extended throughout a student's school experiences and continued into adulthood. Therefore any future programs must be based on the following steps:

1. elementary level career awareness,
2. junior high school - career exploration,

3. secondary school - preparation for the world of work or preparation for postsecondary education with eventual employment and worthy use of leisure time.

The State Board of Education recognized the essentiality of career education in the Kansas schools. The Board adopted the following policies:

1. At its July 6, 1972, meeting the State Board of Education adopted the following sub-goal: "A structural program in career awareness should be developed to provide on the elementary level, cognizance of the wide range of careers in our society and the roles and requirements of the employees in those careers, on the junior high level, an opportunity for "hands-on" exploratory experiences necessary in career decision making, and on the secondary level, a salable skill for entry into the world of work or preparation for postsecondary education with eventual employment."

2. At its January, 1973, meeting, the Kansas State Board of Education adopted the following philosophical concepts on Career Education:

   1. "An effort to diminish the separateness of academic and vocational education.
   2. An area of concern which has some operational implications for every educational level or grade from kindergarten through all postsecondary education.
   3. A process of ensuring that every person exiting from the formal educational structure has obtained an awareness of career opportunities, including exploration and work experience, and has developed employable skills necessary for entry and advancement in the work world.
   4. A direct response to the importance of facilitating individual choice, making it so that occupational preparation and the

acquisition of basic academic skills can be coordinated with developing individual preference.

5. A way of increasing the relevance of education for a greater number of students than is currently true by making all subject matter at every grade level more meaningful.

6. A design to make education an open system in that school leavers and dropouts, including adults, can reaffiliate with the system when their personal circumstances or job requirements make this feasible.

7. A structure whose desired outcomes necessitate cooperation of all segments of the community with the local educational units in utilizing all available resources.

8. An enterprise utilizing new technologies and materials of education to meet developing needs (i. e. individualized programming, simulations).

9. A form of education which provides background for developing academic, occupational, and avocational skills for all students.

10. A system for developing positive and wholesome attitudes toward all useful work."

3. At its January, 1973 meeting, the State Board adopted a developmental definition of Career Education which states as follows:

"The term, career education, is used in general for both the career education and the effects of the program on individuals. To emphasize the developmental characteristic of the effects on individuals awareness - orientation - exploration - selective formulation - action - career integrating self, work, leisure, and resources - the term, <u>developmental</u> career education, is used in this Guide.

Developmental career education is a concept involving processes beginning early in an individual's life and continuing throughout the adult experiences. While developmental career education is seen as a life-long series of processes...

Developmental career education is designed to help individuals in gaining a knowledge of the four career components (self, work, leisure, resources), to assist them in setting life goals for career planning and decision-making, to assist them in translating a self-concept into career terms and to enhance the individual's self-concept in relation to the work world. Developmental career education will help students to investigate life styles in order to establish value systems consistent with their life goals. Through developmental career education students will be able to examine alternatives and use resources to make those decisions that must be made based on the broadest possible foundation of knowledge about themselves and their environment."

With the encouragement of this policy-making, sixteen additional career education exemplary sites were established.

TABLE I

	Began	No. of Elem. Schools	No. of Middle Schools	No. of High Schools	No. of Community Colleges	No. of Students
1. Kansas City, Lawrence, Clay Center	1970	51	18	7	--	17,600
2. Liberal	1970	7	2	1	--	1,105
3. Central KS. AVTS (Newton)	1971	70	10	20	1	26,568
4. Beloit	1971	12	3	9	--	3,892
5. Hill City, consortium (18 rural school dists)	1972	30	15	18	--	9,700
6. Garden City	1972	12	1	1	--	4,811
7. Pittsburg-Emporia	1973	12	3	2	--	6,170

TABLE I (cont.)

	Began	No. of Elem. Schools	No. of Middle Schools	No. of High Schools	No. of Community Colleges	No. of Students
8. Auburn-Washburn (Topeka)	1973	4	2	1	--	2,529
9. Shawnee Mission	1973	51	10	5	--	41,490
10. Wichita	1973	57	16	7	--	52,662
11. Dodge City	1974	8	1	--	--	3,187
12. Whitewater	1974	--	9	--	--	1,200
13. Montgomery County	1974	18	5	4	--	5,300
14. Northwest KS. Ed. Coop. (Colby)	1974	14	3	2	--	4,307
15. Hays	1974	9	1	1	--	3,292
16. Southwest KS. Career Ed. Project (28 school districts)	1974	70	12	28	--	30,173
	TOTAL	425	111	106	1	213,986

In 1974, the Kansas Legislature passed a concurrent resolution that directed the State Board of Education to "encourage, support, and promote career education programs in the Kansas school districts" and to "prepare and submit to the 1975 Legislature a detailed funding proposal designed as expeditiously as possible to make career education opportunities available to all students of Kansas schools." As a result of this, a position of career education specialist was authorized for the State Department of Education.

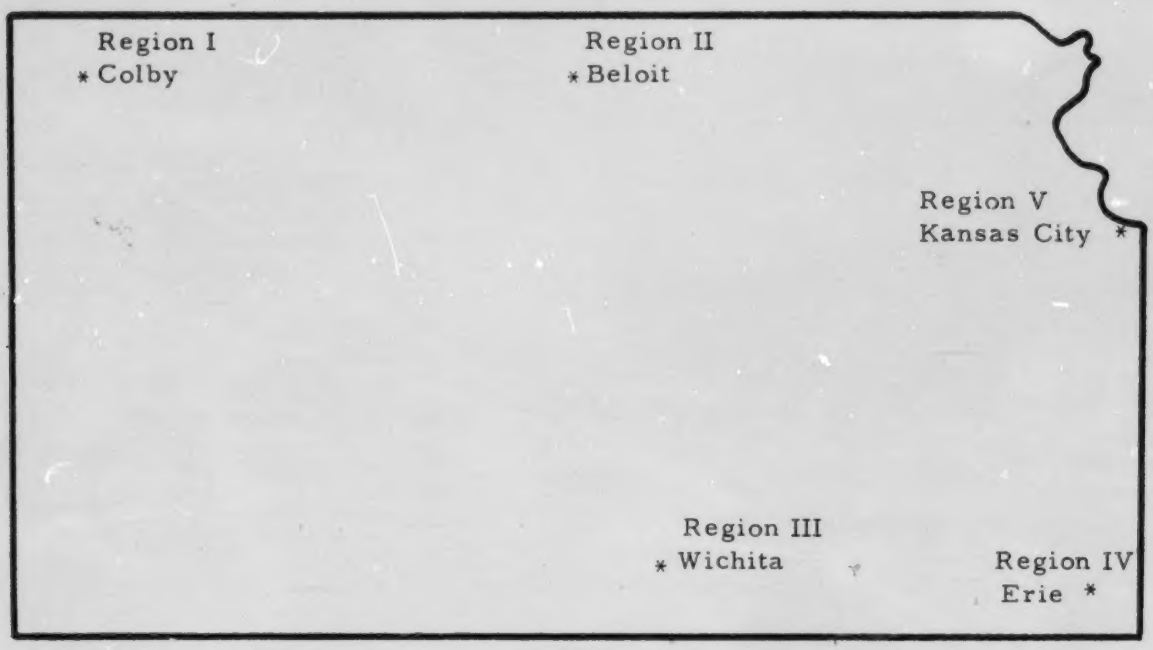
The Governor is his budget message recommended to the Legislature in January, 1975 that $200,000 be appropriated to assist local schools in developing career education through a state managed and directed technical assistance network. The 1975 Legislature passed enabling legislation that allows local school districts to cooperate with each other in pooling funds to support career education activities among any number of local districts.

This legislation will allow school districts of less than 1,500 student populations to cooperate and assist with financial support for certain specialized career education materials and services that may be too expensive to support.

The Kansas State Department of Education allocated the $200,000 contained in the state budget for Career Education in the following manner:

1. Development of an activity based curriculum for elementary students (ABC/EE: Phase 1; Grades 56) which is interdisciplinary and incorprates the philosophy and concepts of Career Education.
2. Implementation of Career Education Activity Kits (CEAK) on a statewide basis.
3. Expansion of Project Discovery to thirty additional junior high school sites.
4. Development of a secondary Career Education program model which incorporates previously determined successful Career Education components into one high school setting.
5. Development of a series of workshops for fifty counselors which update their career guidance counseling and placement techniques.

In FY 1975 a federal career education grant of $150,000 was received by the Kansas State Department of Education to support activities reported herein. The primary function of the director of the federal project has been to facilitate the development and implementation of career education in the state, especially the designated five regions.



The program design and operation have been a primary responsibility of the facilitators on the regional level while project administration has been primarily the responsibility of the project director who has been located in the State Department of Education. This functional division of responsibility is reflected in the fact that the department is the project grantee and also in the federal director's position description which clearly delineates her responsibilities.

1. Review the evaluation design and make recommendations based on time and financial restraints.
2. Acquaint State Department of Education personnel with the goals and objectives of the Federal Career Education Project.

3. Help each facilitator review his or her competencies and assist them in a plan of self-assessment which focuses on improving their Career Education Skills.
4. Conduct appropriate workshops.
5. Develop communication between pre-service training institutions, local school districts, State Department of Education and graduate school to improve teaching training in Career Education. It is felt by many that this has been a significant step.
6. Issue news releases and author the first state career newspaper.
7. Develop a Step by Step Career Education Planning and Implementation Manual for local school districts.
8. Compile a comprehensive listing of state resources (materials, speakers, and places).
9. Develop coding system for analyzing large volume of testing materials.
10. Present Career Education Workshop at State K-NEA Convention.
11. Train and demonstrate to the five regional facilitators the various techniques and tools of career education.

The emphasis of this section of the report will be on those activities designed to fulfill the overall goals and objectives of the project. The goals of this project are explicit in the title:

...To demonstrate transporting career education techniques in Kansas.

...To provide a career education pre-service component to a teacher education program.

These objectives which guided project efforts are listed with their explanation and activities undertaken to achieve each objective.

1. Determine the effectiveness of using successful career education practitioners from the field in providing prospective teachers with an understanding of career education concepts as related to teaching responsibilities.

A new approach to developing teachers with a knowledge and understanding of career education was needed in Kansas. In the past the professional preparation of instructional, administrative, and guidance personnel in career awareness, career exploration, and vocational education lacked coordination in certain areas, was centralized on university campuses, was deficient in field relevance, and only partly targeted toward the individual needs of personnel attempting to provide for the career related instructional needs of the students.

To ameliorate this deficiency in pre-service career personnel preparation, two teacher education institutions were chosen to develop teaching personnel with career education by using successful career education practitioners from the field as instructors for portions of regular teaching methods classes. The teacher education program of the Fort Hays Kansas State College, Hays, Kansas, served as an experimental site to test the hypothesis of the value of the introduction of information about career education concepts as they are introduced into college pre-service methods classes on both elementary and secondary levels. The resources involved local career education practitioners who had already been using career education activities in their classroom. The practitioners were used as a part of the pre-service methods of instruction as well as in the follow-up where prospective teachers observed the activities in the actual classroom setting of the practitioners. Kansas State College of Pittsburg, Pittsburg, Kansas, participated in a supervised teaching program

in which student teachers were placed with teachers who had been using career education activities in their classroom. The actual teaching block time of the practice teacher was spent in the usual teaching block time of the practice teacher was spent in the usual teaching environment with an emphasis on implementing career education in developing their instructional skills.

The director of the project completed the following activities to assist in attaining the first objective of the project.

A. Developed and organized files for career education materials in the State Department of Education. Implementation of career education can be impaired if teachers and administrators are unable to attain information. Such supplemental materials were available in all other curriculum subjects except career education. A search file of practices, programs, materials, and people in career education was developed to meet this need.

B. Conducted in-service sessions for the facilitators in charge of the five regions. The in-service sessions consisted of planning and organizing the career education programs per region according to the state education goals for career education. The sessions included overall instructional strategy and the kinds of information which should be included in specific teaching plans. In addition, the federal director shared the information and materials obtained in the career education conferences held in Washington D.C., Houston, Texas, and Vail, Colorado.

2. To demonstrate and compare the effectiveness of delivering career education activities throught the use of five different organizational bases.

Activities were built on the concept that career education can be developed, expanded, and improved most effectively by the utilization of those successful practitioners who are currently operating career education programs in the state. By encouraging identified successful teachers to conduct in-service programs for those similar type teachers in other schools, their expertise was transported to those teachers who desired assistance in writing objectives, selecting materials for the classroom, and evaluating the effects of the instruction.

The director of the project completed the following activities to assist in attaining the second objective of the project.

A. Conducted assessment of the effectiveness of those career education programs which already are in existence and the level of understanding among the different groups of teachers, student-teachers, students, and parents. The population chosen for the administration of the instruments -- Olympus Career Education Needs Assessment; the Evaluative Research Associates Non-Verbal Career Education Test, and Jarmer Questionnaire for Parents -- was from the five regions. The pre-test was given in November, 1975, and the post-test in June, 1976. For a more complete analysis of the assessment, see the evaluation section of this report.

B. Conducted workshops at the school district's request. The majority of schools in Kansas were cognizant of the phenomenon of career education, but not knowledgeable about necessary curriculum and course content to implement career education. The federal director made fifteen presentations to acquaint the schools' personnel with the career education concept.

C. Conducted in-service meeting for the facilitators of the five regions. The federal director held two-day meetings at each region at least once a month to assist the facilitators in planning programs, increasing their capabilities to relate their teaching to career education, and articulating curricula to enhance traditional programs.

D. Wrote a guide for implementing career education in Kansas schools. Step-by-step guides for planning, assessing, and evaluating a career education program are scarce. To assist administrators in implementing career education, a thirty-five page booklet was written and distributed to all the school districts in Kansas. Copies of the booklet and letters of response follow this report.

E. Collected, developed, and disseminated curriculum material. The federal director knew from her classroom experiences that actual activities per instructional unit were non-existent to alleviate the paucity of teaching aides in the actual classroom implementation of career education, the federal director gathered, and if not available wrote, student activities, resources, and time requirements for instructional plans through the following process: 1) subdivide major instructional units, 2) select student activities, 3) choose appropriate teaching methods, and 4) develop a test on evaluative procedure.

F. Wrote and coordinated information for a Career Education newsletter. To keep those in the field informed of legislation, people, and events concerning career education, some sort of communicative vehicle was needed on the local as well as the state level. A

Career Education newspaper was developed to communicate anything and everything about career education which would be of interest. The newspaper's format included pictures and articles.

Observations

The activities suggest substantial progress toward the designated objectives. Although more effort was exerted on Objective Two, evidence from the assessment indicates that progress was made on Objective One -- change in teacher and administrator attitude about career education concepts -- from the two activities. All activities provided State Department of Education personnel, facilitators, teachers, and administrators, with a maximal understanding of career education and its impact on education in Kansas. For some representatives of these groups, the activities offered a high enough level of understanding of program and curriculum planning in career education to provide assistance needed in the local education districts wishing to initiate such efforts in career education.

STATUS REPORT OF DATA OBTAINED FOR CAREER EDUCATION ASSESSMENT

Mrs. Hazel Rockhold

In 1975, the Kansas State Department of Education received a federal career education grant, funded under Sections 402 and 406, Education Amendments of 1974 to partially support a state-wide career education program. The program was based on the commitment that Kansas schools expand the opportunities for career planning, decision-making, and preparation for employment to all students. To offer these opportunities to all students, a comprehensive state-wide program which involves all facets of Kansas education was to be established.

The Federal Career Education project was developed to assist the state in the assessment of the effectiveness of those Career Education programs which already are in existence. Also, the assessment was to determine the level of understanding among the different groups of teachers, student-teachers, students, and parents as well as to give direction to those in charge of Career Education for improving the methods of integrating Career Education into schools' curricula.

The Olympus Career Education Needs Assessment Instrument and the Evaluative Research Associates' Non Verbal Career Education Test were selected to evaluate the various groups in the progress of Career Education in the state. Before these instruments were selected for the evaluation, the following question was posed: Do Kansas students who have previously experienced a Career Education program show significantly improved knowledge and motivation about careers when compared with students who have not been exposed to Career Education? The selected instrument was designed to provide data

about occupational understanding, self-awareness, attitudes, and career concepts. To include parents' attitudes about Career Education, the Jarmer Questionnaire was administered to parents in only the Colby Region.

Thus far, only the pre-test phase of the assessment has been completed. After the pre-test was given to a random sample in a classroom cluster from the five-region school population, the data was collected and statistically analyzed. The nonparametric techniques of chi square and Mann-Whitney U will be used on the data to determine significant differences in the control group and experimental group, but generalizations to the total school population of Kansas may not be appropriate.

The population chosen for the administration of the instrument was from five Kansas regions which serve as the organizational bases for the administration of career education programs: Region I, Colby; Region II, Beloit; Region III, Wichita; Region IV, Erie; and Region V, Kansas City.

Location	Population	Total Number	Control Group	Experimental Group
Pittsburg, Hays	Teachers	133	65	68
Pittsburg, Hays	Student-Teachers	205	84	121
All five regions	Students K-3 grades	387	157	230
All five regions	Students 4-6 grades	981	500	481
All five regions	Students 7-12 grs.	1474	764	710
Colby	Parents	269	---	---
	TOTAL	3,449		

The Olympus Career Education Needs instrument consists of three tests: For Students, Grades 4-6; For Students, Grades 7-12; For Teaching and Adminis-

trators. The Evaluative Research Associates' Non Verbal Career Education Test was given to kindergarten through third grade students.

The Career Education Needs for Students, Grades 4-6 has forty-five questions to provide information about three concepts -- occupational awareness levels, students' attitudes toward careers, and the positions of students regarding their own career development. Fifteen of the questions include opinion items with a Likert format. The remaining thirty questions have a four-option, multiple choice response format.

There are three drawbacks to this test: (1) There are some items which appear too difficult for the level intended. (2) The instrument in general appears to be inconsistent with the concept of career education by virtue of the simplistic questions that reflect very specific and, in some cases, esoteric occupations rather than a blend of career education insights. (3) There are some ambiguous questions such as Number 21 in which students are asked to respond to a statement "People select an occupation after they get out of school." There is no indication of what level of education is implied by the word "school." Number 26 reads as follows: "People can do any kind of work they want." This is another vague question.

A review of the pre-test data indicates that there is no difference in the responses of the control and experimental groups. A criterion of 10 percent difference between the percentages of groups compared was established as no difference. There was not even a single question with a 10 percent or more difference in response on any questions or any item options between control and experimental groups. The following test items indicate opinions and attitudes of students in fourth through sixth grades.

21. People select an occupation after they get out of school.

	Control	Experimental	Total
A. Agree	38%	45%	41%
B. Disagree	40	32	36
C. Don't know	20	21	21
D. No response	2	2	2

22. If you graduate from college, you get a good job.

	Control	Experimental	Total
A. Agree	60%	57%	59%
B. Disagree	26	26	26
C. Don't know	12	15	13
D. No response	2	2	2

26. People can do any kind of work they want.

	Control	Experimental	Total
A. Agree	44%	49%	47%
B. Disagree	43	38	41
C. Don't know	11	11	10
D. No response	2	2	2

27. Every kind of work is important.

	Control	Experimental	Total
A. Agree	77%	77%	77%
B. Disagree	10	13	12
C. Don't know	11	8	9
D. No response	2	2	2

38. Which of the following is the most important to you in deciding on and occupation?

	Control	Experimental	Total
A. If you make enough money	30%	26%	28%
B. If you like the work	45	52	49
C. If you can advance to a higher position	13	12	13
D. If the geographic location is to your liking	10	9	9
E. No response	2	1	1

The Career Education Needs For Students, Grade 7-12 is designed to assess student awareness and needs in the areas of occupational exploration and career guidance and development. A breakdown of the forty-five question list is as follows: Questions one through ten deal with factual information and are multiple choice option format; questions eleven through twenty deal with information regarding the amount of work experience in various types of work activities that is reflected by the students; questions twenty-one through twenty-five deal with factual information and are multiple choice response format; questions twenty-six through thirty request the respondent to indicate goals in order of importance; questions thirty-one through forty-five reflect statements with a Likert scale format including "strongly agree, agree, disagree, and strongly disagree."

A review of these pre-test data indicates that only one question reflected more than 10 percent difference in response between control and experimental groups. Number 28 -- My third goal in order of importance to me is:

A. Complete high school and find work,

B. Complete a four-year college program,

C. Complete a vocational technical program,

D. Complete a professional program of five or more years in college -- reflected only 11 percent between the control and experimental group. Examples from the test indicate that students in grades 7-12 have the following opinions and attitudes.

31. Secondary school instruction should be established on the basis of student career interests.

	Control	Experimental	Total
A. Agree	84%	86%	85%
B. Disagree	15	13	14
C. No response	1	1	1

32. Schools provide students with ample occupational information for course planning.

	Control	Experimental	Total
A. Agree	64%	69%	67%
B. Disagree	35	30	32
C. No response	1	1	1

34. Choosing appropriate career goals is a natural outgrowth of the student's school program.

	Control	Experimental	Total
A. Agree	65%	67%	66%
B. Disagree	34	32	33
C. No response	1	1	1

40. School is instrumental in helping students decide your careers.

	Control	Experimental	Total
A. Agree	67%	70%	68%
B. Disagree	32	29	31
C. No response	1	1	1

45. It is difficult to learn an occupation without having actual work experience in that occupation.

	Control	Experimental	Total
A. Agree	66%	67%	66%
B. Disagree	33	32	33
C. No response	1	1	1

Table 1
TABLULATION OF STUDENT RESPONSES

	0-9 %	10-19 %	20-29 %	30-39 %	40-49 %	50-59 %	60-69 %	70-79 %	80-89 %	90-99 %
4-6 selecting preferred answers	0	3	5	7	6	11	8	4	1	0
7-12 selecting preferred answers on 15 factual type questions	0	0	0	0	2	2	2	6	2	1

The Career Education Needs Assessment of Teachers and Administrators test consists of sixty questions: forty-five are answered on a Likert scale; the other fifteen have a four-option, multiple choice response format. An assessment of the data from the 133 teachers indicates virtually no difference in the responses of the control and experimental groups. Using the criterion of more than 10 percent difference, only ten of the sixty questions meet this criterion. A close review of those ten items conveys the impression of no significant difference for any of the items. Five of the questions (18, 25, 32, 42, and 45) have a difference of 11 to 15 percent between the

control and experimental group. Questions 49, 51, 52, 56, and 59 reflect a similar range of difference in percentages. A breakdown and implication of these five questions are as follows:

49. Which school personnel are most influential in effective career education decision making.

	Control	Experimental	Total
A. Counselors	33%	21%	26%
B. Teachers	48	70	59
C. Co-curriculum Supervisors	1	4	3
D. No one in school	17	4	10
E. No response	1	1	1

From these percents, it can be assumed that teachers are the most influential school personnel in effective career decision making. The teachers in the experimental group who are involved in current career education programs indicate this opinion with a larger percentage than the teacher in the control group.

51. During the last school year, how many community resource persons did you coordinate into your classroom instruction?

	Control	Experimental	Total
A. None	51%	31%	41%
B. 1-3	34	35	35
C. 4-5	8	15	11
D. 6 or more	0	16	8
E. No response	7	3	5

The response indicates that the teachers who are involved in current career education programs utilize a larger number of community resource

persons than do those teachers in the control group. The majority of both groups indicate utilization of fewer than four community resource persons.

52. To effectively infuse the career education concept with existing courses it is necessary that the teacher first

	Control	Experimental	Total
A. Develop career educational materials	6%	6%	6%
B. Be aware of various occupations	28	12	20
C. Understand career education concept	57	81	69
D. Use community resources	9	1	5
E. No response	0	0	0

The majority of both groups indicate that the first priority in infusing the career education concept with existing courses is to understand the career education concept; the teachers in the experimental group indicate this opinion with a higher percentage (80%) than those in the control group (56%).

56. As a teacher, counselor or administrator, my present degree of competency for implementing career education may be described as:

	Control	Experimental	Total
A. Very capable	0%	2%	
B. Capable	27	48	
C. Weak	53	38	
D. Unprepared	15	10	
E. No response	3	0	

The percentage of responses indicates that educators involved in career education programs feel slightly more capable of implementing career education than those who have not been involved in such programs. The majority (68%) of teachers in the control group feel their degree of competency for imple-

menting career education as weak or unprepared, while 48 percent of the experimental groups agreed.

59. For the career education concept to have an impact on the school system, it is essential that initial support be provided by:

	Control	Experimental	Total
A. The community	48%	37%	42%
B. The teachers	23	40	32
C. Administrators	23	22	23
D. The students	6	1	3

Teachers of the control group (47 percent) feel that the initial support for the career education concept should be provided by "the community;" a higher percent (39 percent) of the experimental group indicated that teachers should provide the initial support. It should be noted that almost as many teachers in the experimental group identified the belief that initial support should be provided by "the community." Thus, the percentage suggests a possible trend for career education in the schools rather than a difference in response from the two groups.

Interpretation of all the questions can be made in relation to the preference of response option by the total group of teachers as well as by the control and experimental groups. These five were chosen for examples only.

Student-teacher groups responded to the same test as the teachers. Of the sixty questions, twelve items reflect a difference of more than 10 percent in agreement between the control and experimental groups. Nine items have a difference of 12 to 17 percent in agreement.

In comparing the responses between teachers and student-teachers, an important difference can be determined. For example, student-teachers attach more significance to "hands on" work experience regarding career awareness and to the choosing of career education goals as an outgrowth of present school programs than do teachers. According to the answers to questions 7, 23, 24, 34, and 35, a higher percentage of the teacher group places emphasis on college preparatory subjects, agrees that career development begins early in childhood, and believes that preparation for life should center on learning academic subjects in school classrooms. In addition, the teacher group felt stronger about school programs helping students to understand how important careers are in making a better society (Question 38) and about the need of teachers' support before the career education concept can have an impact on the school system (Question 39).

The greatest difference between teachers and student-teachers occurred in Question 11. The majority of the student-teachers -- 52 percent -- believe that career education placement is a responsibility of the school for all students. Only 32 percent of the teachers concurred on this question.

As noted before, the Jarmer Questionnaire was given only in Region I, Colby. The instrument consists of forty-eight questions to be answered on a Likert scale. Numerous items of the instrument are very useful to the purpose that the assessment was intended. Respondent grouping was apportioned to 140 mothers and 129 fathers.

Valuable information can be gleaned from the results of this instrument to illustrate parental attitude about career education. The following statements can be made from the data of the identified questions.

Part I. Question	Interpretation
23	Parents (86%) feel that elementary students should have some work experience at home.
6	Parents (81%) should be involved in helping students prepare for occupations.
30	Parents (81%) feel that their elementary child should learn how to use leisure time.
10	Parents (68%) believe that every elementary school graduate should leave grade school knowing something about many different occupations.
8	Parents (60%) feel that elementary schools should have workers such as mechanics, farmers, and doctors going to the schools and talking about their jobs to students.
26	Parents (51%, 22% undecided) disputed the statement that elementary school classes are designed in such a way that they waste a lot of their children's time.
20	Parents (50%) feel that field trips for elementary children to observe workers should be provided more often.
24	Parents (48%, 22% undecided) feel that the elementary school developed good work habits in their children.
15	Parents (34%, 34% undecided) feel they teach their elementary age child more about occupations while he is at home than the teachers do while he is at school.
25	Parents (33%, 38% undecided) agree that most subjects and their child's classroom are related to how they may be used in the world of work.
29	Parents (43%, 23% undecided) believe that generally teachers do not have enough time to relate careers to what they teach.
8	Parents (38%, 28% undecided) feel that career education is another name for vocational education.
7	Parents (49%, 21% undecided) did not know there was career education in their elementary school.
2	Parents (14%, 31% undecided) indicate they understand the concept of career education well enough to explain it to someone else.
5	Parents (26%, 28% undecided) believe that career education is a separate subject.

In a breakdown of the mothers' vs the fathers' response, six of the total forty-eight questions indicate a percentage difference of more than 10 percent. The following items indicate some discrepancy between responses of the group of mothers and the group of fathers.

	% Agreeing		% Undecided		% No Response		Total % Agr.	Und.
	M	F	M	F	M	F	M	F
9. I believe it is important for teachers to teach reading, writing and arithmetic without starting a career education program.	30	40	25	10	9	15	40	19
14. Every elementary school graduate should leave grade school knowing something about many different occupations.	73	60	9	10	10	15	68	10
15. As a parent, I seem to teach my elementary age child more about occupations while he is at home than teachers do while he is at school.	23	43	38	29	10	17	34	34
18. I think businessmen should be called upon frequently to serve as resource speakers in the elementary school classrooms.	50	34	22	30	10	17	43	26
20. Field trips for elementary school children to observe workers should be provided more often.	55	42	22	25	9	17	50	24
29. Generally, teachers do not have enough time to relate careers to what they teach.	52	31	20	25	8	17	43	23

The Evaluative Research Associates' Non Verbal Career Education Test, K-3 consists of three parts of ten items each: Part 1, Occupational Similarities is designed to assess the ability of students to match occupations according to which ones are most alike; Part 2, Occupational Differences

measures the ability of students to select which occupations are least alike; Part 3, Occupational Tools measures the ability to identify the tools used in selected occupations.

Teachers of the control and experimental groups of kindergarten through third grade students in the pre-test phase of the assessment are critical of the test. The major objection is to the difficulty of the items for primary students. Some feel the instrument is closer in nature to an intelligence test than a knowledge of occupations. Selection of an adequate instrument to assess grades kindergarten through third grade is difficult because of the limited number of such tests that are available.

Conclusions about the difference between the performance of the experimental and control groups of students, teachers, and student-teachers are not appropriate to this report. Conclusions will be drawn after the analysis of the post-test. At the time the collected data are only to give direction to the research and to areas in which research should take place before the planning of a comprehensive state-wide career education program occurs.

Various revelations have been disclosed in the pre-test data. The major discovery is the vast amount of support for and belief in career education and its place in the educational curriculum. In examining the attitudes of teachers and student-teachers, it is discovered that both groups support the purposes of career education; however, student teachers attach more significance to "hands-on" experiences regarding career awareness development than experienced classroom teachers do. Parents, both mothers and fathers, support career education but are not clear about the aims, scope, and depth of career education. Parents encounter a problem when they attempt to explain career education to other parents, especially in its relationship to vocational education.

The second discovery is the need for instruments that measure and assess abilities and attitudes in career education. The availability of such instruments is almost nonexistent, especially on the primary grade level. It is possible the project will have to write its own tests in some areas in order to acquire acceptable data.

The first phase -- pre-test -- is completed. With the completion of the post-test phase in July of 1976, the project will be well into the development of a comprehensive state-wide program in career education.

For further information concerning the project, contact Mr. Wilbur Rawson, Director of Career Education and Special Programs, Division of Vocational Education, State Department of Education, 120 East 10th, Topeka, Kansas 66612.

DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
OFFICE OF EDUCATION
WASHINGTON, D.C. 20202

CAREER EDUCATION PROGRAM

PARTICIPANT SUMMARY

NOTE: Participants include those DIRECTLY served by the project or, in the case of most parents and persons in the business, labor industry community, who actively assist in project implementation. "Actively assist" includes efforts such as serving as resource persons, serving on Advisory Groups, providing work experience, etc.

FORM APPROVED
OMB NO. 51-R118

NUMBER OF PARTICIPANTS (see NOTE above) WHO ARE	RACE/ETHNICITY (all Participants including Handicapped, Gifted and Talented, and Low Income)						OF THE TOTAL (column (6)) NUMBER WHO ARE			OF THE TOTAL (column (6)) NUMBER WHO ARE	
	AMERICAN INDIAN OR ALASKAN NATIVE (1)	ASIAN OR PACIFIC ISLANDER (2)	BLACK/ NEGRO (3)	CAUCASIAN/ WHITE (4)	HISPANIC (5)	TOTAL (sum of columns (1) through (5)) (6)	HANDICAPPED (7)	GIFTED AND TALENTED (8)	LOW INCOME (9)	MALE (10)	FEMALE (11)
STUDENTS											
ELEMENTARY (K-6)	857	99	7,947	84,446	1,344	94,693	7,638	3,799	14,524	47,019	47,674
MIDDLE/JUNIOR HIGH (7-9)	240	42	2,588	20,118	381	23,369	1,609	746	4,458	11,153	12,216
SENIOR HIGH (10-12)	138	33	3,188	29,258	434	33,051	3,464	1,692	7,653	16,065	16,986
2-YEAR COLLEGE	465	0	255	2,751	44	3,515	247	154	834	1,818	1,697
4-YEAR COLLEGE	63	6	491	5,163	76	5,799	9[illegible]	760	1,287	2,897	2,902
ADULTS (nonmatriculated)	25	1	161	1,740	28	1,955	230	98	684	1,012	943
SUB-TOTAL	1,788	181	14,630	143,476	2,307	162,382	13,283	7,249	29,440	79,964	82,418
EDUCATIONAL PERSONNEL											
TEACHERS	28	2	405	8,924	13	9,372				3,555	5,817
COUNSELORS	0	0	8	214	0	222				120	102
ADMINISTRATORS	0	0	12	758	0	770				687	83
MEMBERS OF THE BUSINESS/ LABOR INDUSTRY COMMUNITY	0	0	7	915	0	922					
PARENTS	0	0	7	1,046	0	1,053					
OTHER (specify)	0		0	0	0	0					
TOTAL	28[illegible]	2	439	11,857	13	12,33[illegible]					

OE FORM 467, 2-76

CRITIQUE AUDIT REPORT

1975-76

AN EXEMPLARY PROJECT TO DEMONSTRATE TRANSPORTING CAREER EDUCATION TECHNIQUES IN KANSAS AND TO PROVIDE A CAREER EDUCATION PRE-SERVICE COMPONENT TO A TEACHER EDUCATION PROGRAM

Kansas State Department of Education

Topeka, Kansas

Prepared by

Larry L. Havlicek

2570 Cedarwood Avenue

Lawrence, Kansas 66044

May 10, 1976

CRITIQUE AUDIT REPORT

INTRODUCTION

The educational program audit is an external, independent review of a project which is designed to (1) assess the appropriateness of the evaluation plan for determining the effectiveness of the Title IV project, and (2) verify the results of the evaluation of that project. The role of the program auditor is that of an independent observer and reporter. The functions of the program auditor include such tasks as critiquing the evaluation design, making suggestions as to alternative methods of evaluation, reporting on progress toward project process and product objectives, and verifying the results of the evaluation process.

The program audit for the KSDE Career Education Project will be conducted in three phases during the fiscal year. First, the auditor will prepare a Preliminary Audit Report on the evaluation design. The purpose of this initial critique report is to determine whether the proposed evaluation plan for the project provides a basis for an adequate evaluation. The auditor must review the technical quality and measurability of the project's objectives and determine whether the overall evaluation plan, types of instruments used, and procedures for collecting data are adequate in terms of the stated objectives of the project. Discrepancies, inconsistencies, and/or omissions will be noted and suggestions will be made as to clarifications that are needed or additional planning that should be done to provide a stronger evaluation procedure.

The second phase of the educational program audit will consist of an on-site visit to the project and the preparation of an Interim Audit Report on the basis of that visit. The purpose of the on-site and Interim Report is

to provide a check on the progress and on the documentation of the evaluation activities as specified in the final evaluation plan. It is also to review modifications and/or revisions in the Evaluation Plan, to check on follow-through with suggestions that were made by the auditor in the initial Critique Audit Report, and to document evaluation activities that have been completed. The Interim Audit Report thus provides the Director of Project KSDE with an independent opinion as to whether the project is being evaluated according to specifications outlined in the Evaluation Plan.

The third and final phase of the audit process is the Final Audit Report. This final report deals primarily with the product evaluation activities and with the second half of the project's process evaluation activities. The purpose of this final report is to summarize the auditor's activities and findings during the year and to verify results reported in the Final Evaluation Report for the Career Education Project.

In summary, the major purpose of the educational program audit is to provide an independent opinion regarding the evaluation of the Career Education Project. Auditing procedures will be based upon those prescribed in the Educational Program Audit Handbooks prepared by Stenner and Webster (Institute for the Development of Educational Auditing; Arlington, Virginia, 1971) and by Morin (U.S. Office of Education, 1971) and according to procedures suggested by the Kansas State Title IV Office. It is the intent of the auditor that such an opinion may help insure that the evaluation plan and evaluation process for the project will provide the necessary data to allow successful completion of the project objectives and documentation of this innovative effort. Through effective evaluation and documentation of project results, the Career Education Project may perhaps provide a meaningful demonstration program that can be exemplary within the State of Kansas and across the nation.

This Critique Audit Report has been prepared on the basis of: (1) a meeting with the project directors and evaluator, and (2) original project application, (3) letter indicating the testing groups used, (4) an outline of the evaluation plan, and (5) a status report of data obtained for career education assessment covering the pretests that have been given to date. The first section of this report will provide an overview of the project and its evaluation plan. The second section will provide a detailed critique of each objective, and the final section will summarize the report and provide recommendations.

SECTION I: OVERVIEW OF THE OBJECTIVES AND EVALUATION PLAN

There are two major objectives for this project as delineated on pages 16d and 16e of the original proposal. According to an outline delineating the timeline, data sources, design, and data analysis, a pretest/posttest, comparison group design is being used to evaluate the first objective. For the second objective, a pretest/posttest comparison of five different organizational bases will be made, and for the teacher component of this objective, a pretest/posttest, comparison group design will be used. For each objective, there are different data bases which will be used, which in addition to being combined, can also be viewed as several replications of the study to determine consistency of results plus regional differences.

Thus, the basic design is satisfactory. The sampling procedures appear to be adequate and the size of the samples appear to be adequate to provide reliable and valid results. Thus, the overall design seems to be appropriate. The following section will present a detailed review of each objective's evaluation.

SECTION II: DETAILED CRITIQUE OF EACH OBJECTIVE'S EVALUATION

The following is a critique of each of the two product objectives and corresponding evaluation procedures. Performance objectives are typically

reviewed in terms of the following criteria:

a. Is the person responsible for the expected behavior identified?

b. Is the behavior desired indicated?

c. Is the instructional variable related to the behavior to be observed indicated?

d. Is the measurement instrument or procedure given?

e. Is the time necessary to bring about the desired behavior given?

f. Is the expected proficiency level given?

Although the basic objectives as presented on pages 7 and 8 of the original proposal do not include all of the above aspects, the six details are presented in the outline of evaluation activities and in the documents enumerated on page of this report. The auditor notes that many of the documents did not have a date. Thus, it was not possible to determine which procedure superseded others. The detailed critique will be based upon what seems to be the most appropriate procedure. Any deviation from this will possibly affect the evaluation of each objective.

Objective 1: "Determining the effectiveness of using successful career education practitioners from the field....." (page 7).

According to the original proposal, page 16d, two sites will be used for this objective -- Hays and Pittsburg. According to the Career Education Project outline, there were to be 50 students from each site in the experimental group and 50 students from each site in the control group. However, from the Status Report, page 2, it appears that there were a total of 84 student teachers from both sites in the control groups, and 121 student teachers in the experimental groups. Although this does not approach the 200 students called for in the Career Education Project outline, the sample size appears to be large enough to yield reliable and valid comparisons. The pretests and posttests were scheduled for the beginning and end of each semester. It

appears that the pretests have been given, but is not clear as to whether or not posttests were given at the end of the first semester, since as stated on page 2 of the Status Report, "Thus far, only the pretest phase of the assessment has been completed." The Olympus Career Education Needs Assessment Instrument used to evaluate this objective appears to be valid for this evaluation. According to page 2 of the Status Report, the Mann-Whitney U will be used to analyze this data. The auditor recommends that a parametric statistic such as Fisher's t or the analysis of variance be used in place of the Mann-Whitney U. The Olympus instrument seems to be yielding an approximation to an interval scale, thus a parametric test can be used. (References: N. H. Anderson, Scales and Statistics: parametric and nonparametric. Physchological Bulletin, 1961, 58, 305-316; B. O. Baker et al, Weak measurements vs strong statistics. Educational and Psychological Measurement, 1966, 26, 291-309, and L. Havlicek & N. Peterson, Robustness of the t test, Psychological Reports, 1974, 34, 1095-1114.) The parametric test would be more powerful to use. The chi square analyses for the categorical data is appropriate, however, it is not clear what differences between experimental and control groups will be tested. The objective calls for a significant change in attitude. However, experimental and control differences are referenced on page 2 of the Status Report. Thus, it is not clear what comparisons will be made. The auditor wishes to point out that the chi square analysis is for independent samples and not valid for dependent groups. If there is a 2 x 2 table, then the McNemar chi square test for dependent samples can be used. For larger than 2 x 2 tables, the Cochran Q test can be used ((S. Siegel, Nonparametric Statistics, McGraw-Hill, 1956, pp. 161.166.) This is for k dependent samples, and can be used to determine the significance of the change from pretest to posttest. However, to determine whether or not the

control group changed more than the experimental group poses other statistical problems. The auditor recommends that the evaluators outline the statistical procedures so that it is clear exactly what data will be used for which analyses.

As pointed out, the Olympus test has several limitations, but the auditor does not believe that these limitations seriously affect the evaluation. Instruments in this area of career education are scarce, and this instrument seems to be as valid as others currently available.

At the bottom of the first page of the Career Education Project outline, Target Group E calls for 100 supervising teachers in both the experimental and the control groups. However, it is not clear whether or not these supervising teachers were tested. Again, the auditor suggest that clarification be made as to which target populations were sampled and how the data collected was or is to be analyzed.

Objective 2: "The effectiveness of five different organizational bases for the systematic delivery of career education activities....." According to the original proposal, five different organizational sites or bases will be compared. These were outlined on page 16e of the proposal and the five organizational bases were outlined. However, it is not clear what the sampling is from each region or base. The table on page 2 of the Status Report indicates that 1,474 students from all regions have been tested for grades 7 through 12, 981 for grades 4 through 6, and 387 for K through 3. However, how many from each of the regions is not stated. The October 30th letter from Sally DeMoss seems to outline the sampling from the Southeast Kansas region. However, what the other four areas' sampling is is not clear with the information provided the auditor. The pretest to posttest timeline appears to be appropriate. However, the analysis of data is not clear. Both the t test and the analysis

of covariance are listed as the data analysis technique. With five groups, the analysis of variance and covariance seems to be appropriate, but it is not clear whether or not the protest will serve as the covariate or whether some other variable will be used. Also, is the criterion the posttest or the change from pretest to posttest?

SECTION III: SUMMARY AND RECOMMENDATIONS

As noted in the first part of this critique audit report, the basic evaluation plan for the project is satisfactory. The use of random samples for both control and experimental groups, the use of pretests and posttests, and the statistical comparisons are generally acceptable. However, the details of the plan need to be delineated.

As pointed out in this report, it was difficult to know which schedule of evaluation activities to follow. There were not dates on three of the documents reviewed. Likewise, it was difficult to following the sampling plan to know which sample was for which aspect of each objective. In view of this, the auditor suggests that a detailed outline be developed which would delineate each analysis in terms of which aspect of each objective was being evaluated. Possibly, following the outline on the tan colored two-page chart entitled Career Education Project might be a starting place to delineate specific evaluation activities. As noted in this report, the auditor made some suggestions as to data analyses procedures. However, specific recommendations cannot be made until details regarding all evaluation activities are clarified.

The auditor suggests that such an outline be delineated and that this outline be reviewed by the auditor when it is prepared. Thus, any modifications that might be needed can be made before data analysis procedures are begun. Also, there may be some aspects of posttest data collection which might pose problems which can be checked before this data is collected.

The auditor agrees to meet with the project directors and evaluators after such delineation has been made. At that time, an on-site visit will be made to the project to review data analysis procedures. This meeting can be set at a convenient time to all parties concerned.

Respectfully submitted,

/s/ Larry L. Havlicek
Project Auditor

REGION REPORTS

FINAL REPORT

Project No. 554AH50323

Grant No. 6007603905

Career Education

Project Director

Kansas State Department of Education

The Project reported herein was supported by a grant from Career Education Programs, U.S. Office of Education. The opinions expressed in this publication do not necessarily reflect the position of the Office of Education and no official endorsement should be inferred.

Mrs. Hazel Rockhold, Director
Kansas State Department of Education

July 1, 1975, to June 30, 1976

CAREER EDUCATION PROJECT
(Federal Grant)

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REGION I

FINAL REPORT

Project No. 554AH50323

Grant No. 6007603905

Career Education

Region I

Project Facilitator, Ms. Diana McBride

Colby

The Project reported herein was supported by a grant from Career Education Programs, U. S. Office of Education. The opinions expressed in this publication do not necessarily reflect the position of the Office of Education and no official endorsement should be inferred.

Dr. Gary Jarmer, Director
Region I

July 1, 1975, to June 30, 1976

Region I is in the northwest part of the state of Kansas and is composed of twelve counties and twenty-four school districts. It is administered by an Educational Services Unit. Ms. Diana McBride has been employed as Career Education Facilitator for this area.

Accomplishments

The following is a list of activities that were accomplished by Region I.

1) Conducted an inventory of Career Education Activities and community resources in the region.

One of the first steps in implementing a Career Education Project is to determine what resources already exist in the area. Community resources are very important. Many community members and businesses are extremely willing to help in the schools with their expertise. Therefore, a career resource manual was compiled.

Of course, the manual is not complete, but it is constantly being added to and revised. However, the use of the manual was very beneficial to schools and took advantage of it. Those teachers who wanted to could simply call me and I would arrange field trips and resource speakers. Another advantage of this manual is that many of the schools here are in such rural settings that it is necessary for them to go on field trips and have speakers from the largest towns in the area. A good example of this is where students from Cheylin High School shadowed businesses in Goodland, Kansas.

2) Identified and compiled information on successful Career Education Practitioners in the area.

One method of inservicing teachers with the concepts and practices of Career Education was to use people in the inservice who are successful

practitioners. We felt that teachers could better identify with their peers. Teacher prepared materials could also be displayed and emphasized in this manner.

The list of practitioners that is included in this report was compiled in a number of ways. Some were identified by their building principals as being Career Education Practitioners and others were identified by me as we worked together throughout the year.

CAREER EDUCATION PRACTITIONERS

NAME	SCHOOL	SUBJECT AREAS/GRADE LEVEL
Ron Johnson	Almena	Art
Ken Muleh	Norton	Math
Charlie Nelson	Norton	Counselor
Ward Cassidy	St. Francis	Counselor
John Goering	Oberlin	Industrial Arts
Darryl Parker	Oberlin	Counselor
Ethel Haneke	WaKeeney	Reading
Jim Nelson	WaKeeney	Science
Wes Randall	WaKeeney	Social Science
Mildred Hilatic	WaKeeney	Elementary
Jane Dundass	WaKeeney	Elementary
Della Obenmeyer	WaKeeney	Math
Doris Crippen	Hill City	Grade 1
Jerry Poage	Hill City	Carpentry
Bruce Denmarie	Hill City	History
Joe Farrell	Hill City	Agriculture
Beverly Stafford	Hill City	Home Economics

NAME	SCHOOL	SUBJECT AREAS/GRADE LEVEL
Pat Turrell	Colby	Grade 1
Greg Waldschmidt	Colby	Grade 1
Connie Kniep	Colby	Grade 2
Lucrecia Swanson	Sharon Springs	Home Ec.
James Needham	WaKeeney	CVEP
Carl Briney	Oakley	CVEP
Cindy Harold	Weskan	Grade 3-4
Lois Starnes	Winona	Business
Doren Yount	Atwood	Counselor
Charles Elijah	Cheylin	Counselor
Rick Jewett	Cheylin	Math
Jim Keller	Oberlin	Career Education
Ray Fitzpatrick	Norton	Gifted
Mr. Schmidt	Norton	Counselor
Dean Hagman	Hoxie	Social Studies
Ada Lou Rose	Hoxie	Counselor
Mary Alice Gottschalk	Hill City	Title I Tutor
Jim Springston	Goodland	Social Studies
Mel Pekofsky	Goodland	Counselor
Layton Kaiser	Grainfield	Counselor
Carol Spencer	Grinnell	Counselor

3) Assisted in developing a Regional Plan of Action for expanding Career Education including each local school's plans.

In order for the schools to retain control of Career Education efforts in their school, they would establish a local advisory group. It was with this group that I did consultative work. It was usually through their

suggestions that schools would adopt certain policies concerning Career Education.

4) Assisted in planning inservice sessions to provide needed competencies for developing Career Education.

Almost all schools in the region received some type of inservice on Career Education in the past year. Cheylin, Oberlin, Lenora, Morland, Hoxie, Colby, Weskan, and Sharon Springs had inservices in which the entire faculty was involved. Atwood, Colby, Brewster, Goodland, and Oakley had inservices in which only a segment of the faculty was present. Work was done with individual teachers in every school system.

Inservices entailed concepts, use of materials, and building classroom materials. Sharon Springs had an inservice class for one semester from which participants could receive three (3) college credit hours.

Another type of interaction was the use of the Vocational Exploration Group (VEG) with many of the students in the region. Students at Grainfield, Cheylin, Winona, and Colby went through the VEG. It was very well received by the students. Information received from the VEG was followed-up by setting up individualized materials for the student.

(5) Compiled data for use in developing guidelines for carrying on Career Education, including costs, etc.

At this stage of implementing Career Education into the schools in this region, it is very difficult to develop budget costs for the individual schools. Costs can be established for Regional Career Education Coordinator such as myself. Having access to the NKEC materials has been a major factor in eliminating cost for this particular coordinator. Career Education materials were plentiful for use by the coordinator and the

schools. As a future date when the schools become fully involved in Career Education a need for a larger materials budget will be necessary. However, for the present position the budget for the past year was satisfactory.

It is my suggestion, however, that to thoroughly do the job in a region that covers as many miles as this one, two coordinators are needed. It is presently virtually impossible to be in each school more than once a month. In my opinion that is not enough personal contact with the teachers. They need someone who can be there often to become familiar with the teachers and their needs. The only other alternative would be to have a full or part-time facilitator in each school - someone who had no other duties other than Career Education.

6) Cooperated with the State Coordinator in the Career Education Network

7) Organized and arranged for meetings of a Regional Consortium Career Education Advisory Committee.

Due to the area and size of the schools in this region, it was not feasible to have regional advisory committees. Instead, the local schools set up their own advisory committees.

A regional career education conference was held in Colby. All teachers from the region were invited to attend. Over 90 teachers were in attendance. Speakers were practitioners from all over the state. The conference was a big success. Teachers recommended that it be a yearly event.

A special workshop was also held for all the counselors in the region. The topic discussed was the Kansas Action Model for Career Education.

Regional Status of Career Education

School	Career Ed. Person
Almena	
Atwood	Doren Yount
Cheylin	Charles Elijah
Brewster	
Colby	Gary Hennigh
Goodland	Mel Pekofsky
Grainfield	Layton Kaiser
Grinnell	Carol Spencer
Herdon	
Hill City	Mr. Moos
Hoxie	Ada Lou Rose
Jennings	
Lenora	Ann Thrasher
Morland	Mr. Smiley
Norton	Mr. Schmidt Mr. Nelson
Oakley	Jack Foster
Oberlin	John Goering
Quinter	
Rexford	
St. Francis	Ward Cassidy
Sharon Springs	Bill Hatton
WaKeeney	James Needham
Weskan	Bettie Ainsworth
Winona	Lois Starnes

Some schools have developed school-wide projects, while others are limited to each individual classroom. Sharon Springs is one school that adopted a school-wide project. The entire school was involved in the designing, producing, and promoting of a small building.

Nine schools have developed a plan which involves the extensive use of Project Discovery materials. These schools will be owning their own kits next year. During this past year they shared in the use of the one kit the NKEC has.

Two schools have set up Shadowing Programs. One school is a rural school and the students are bussed into a larger town. Students' reactions to this was quite favorable.

Several schools in the region have set up small career centers in a corner of their library. It usually consists of a viewer and cassette player where students can go to explore different occupations. Hoxie High School is setting up a Career Resource Center on a lot larger scale. They will have several different AV machines available, free material files, an assortment of software and speakers from time to time. The plan is to set up similar to a Resource Center at South Junior High in Colorado Springs, Colorado.

Future

At the beginning of this project only two schools in this region had much of an idea at all what career education was all about. This year has been an awareness time for all schools. Only in the last few months have they come to the point of being ready for the exploration stage. But they are definitely ready and begging to get their "hands on" into Career Education. It is the

responses like this that cannot be measured by any tests. I can only hope that my word is valid. Already superintendents and principals are asking me to be present for inservices in their schools in the fall. The teachers are starting to demand it of their administration. I think it would be a terrible mistake were this project not continued for another year. It would only confirm what I have heard in the schools over and over; "this is just another government program to spend money, here today gone tomorrow". I hope I have been right in saying that this is not true.

REGION II

FINAL REPORT

Project No. 554AH50323

Grant No. 6007603905

Career Education

Region II

Project Facilitator, Mr. Richard Webb

Beloit

The Project reported herein was supported by a grant from Career Education Programs, U. S. Office of Education. The opinions expressed in this publication do not necessarily reflect the position of the Office of Education and no official endorsement should be inferred.

Dr. Bob Severance, Director
Region II

July 1, 1975, to June 30, 1976

Beloit

Region II is Beloit, located in the north central region of the state. It is governed by the Beloit Area Vocational Technical School. It is composed of fourteen counties and approximately 36 unified school districts. Duane Pierce was the area facilitator for the first part of the year and Richard Webb was employed in January.

Accomplishments

The following is a list of activities that were accomplished by Region II.

1) Administered 540 career education pretest and posttests.

2) Conducted a regional survey concerning the status of career education. Of the thirty-six (36) unified school districts initially identified:

   a) Fourteen indicated that they had on-going career education projects.

   b) Fourteen indicated that they were interested in career education even though they had no on-going programs;

   c) Six indicated that they were not interested in implementing career education at this time; and

   d) Two did not respond to the request for information.

3) Compiled a list of regional public and private school enrollments, faculties, and facilities.

4) Developed a list of regional geographic career interest characteristics.

5) Conducted a survey of media equipment and software.

6) Initiated and implemented plans for a teacher in-service program in Career Education with Kansas State University.

7) Hosted two large workshops which were very well received by both teachers and administrators.

Regional Status of Career Education

Ottawa County

USD #240 Bennington (Twin Valley)

The District has made a commitment for a career education presentation in August.

Republic County

USD #469 Belleville

The District was very receptive to our offer to present a career education workshop. Follow-up services should be provided to the district.

USD #426 Scandia

The District's involvement in career education will be decided by the new superintendent.

USD #455 Cuba

No involvement in career education at this time.

Jewell County

USD #276 Esbon

The superintendent is a native of New Jersey and has had considerable experience with career related projects.

USD #277 Burr Oak

Some interest in career education, which needs further development.

USD #278 Mankato

The Mankato district was one of our Career Education cooperating districts last year.

USD #279 Jewell

The district is a participant in our Career Education program to distribute materials. They plan to participate again next year. The staff could use some in-service sessions to review how to best use the materials.

Washington County

USD #221 North Central (Morrowville)

The district's initial response to Career Education is positive. The district needs to be contacted next year.

USD #222 Washington

The district has expressed interest in Career Education, but no activities have been initiated at this time.

USD #223 Barnes

The district has expressed interest in career education, but no activities have been initiated at this time.

Clay County

USD #379 Clay Center

Mr. Poage has been given responsibility for Career Education efforts in all elementary and junior high classrooms. He provides materials and suggested activities which advance the concept of career education. Region II has called upon him as a resource person at in-service meetings in the surrounding counties. His experience with the original Clay Center Exemplary Program makes him one of our most effective resource speakers.

Cloud County

USD #333 Concordia

The district provided junior high students our Career Education testing program. The district is interested in developing a Career Education program.

USD #334 Glasco

The superintendent has endorsed the concept of career education as it is described in the Kansas Guide for Career Education. The district could benefit from follow-up contacts.

Mitchell County

USD #273 Beloit

The local Beloit district has participated in the career material consortium out of the AVTS office. Their curriculum was recently altered to teach a career class at the junior high level.

USD #272 Cawker City

The district has an on-going Career Education program.

Washington County

USD #224

Some interest in Career Education needs to be pursued further next year.

Lincoln County

USD #298 Lincoln

The district has been involved in some Career Education activities and would benefit from a follow-up contact.

USD #299 Sylvan Grove

Some interest in Career Education which needs to be pursued further next year.

Ottawa County

USD #239 Minneapolis

The elementary and junior high school at Minneapolis provided groups for our Career Education testing program. The district has enthusiastic feelings for Career Education. Future contacts should be initiated.

Dickinson County

USD #393 Solomon

Mr. Gray is well informed about the career education concept. He and his elementary principal attended the elementary workshop at Miltonvale. He liked the Duso D-1 demonstration for elementary use. Though his district is small, he would like some in-service session within his own district this fall.

USD #435 Abilene

No involvement in Career Education at this time.

USD #473 Chapman

Mr. Root has asserted leadership and endorsement of career education within his administrative circle.

USD 481 Rural Vista (Hope, White City)

No Career Education activities at this time.

USD #487 Herington

No Career Education activities at this time.

Ellsworth County

USD #327 Ellsworth

No Career Education activities at this time.

USD #328 Lorraine

Middle school organization is being modified for the coming school year. They plan to use the Project Discovery material in that building.

Russell County

USD #407 Russell

No Career Education activities at this time.

Saline County

USD 306 Southeast Saline

No Career Education activities at this time.

USD #307 Ell-Saline

The district has expressed interest in Career Education which needs to be pursued further.

USD #305 Salina

A survey of the teachers in the Salina schools indicates that a large number of activities related to Career Education are being conducted. Following is a summary of the types of activities which teachers are emphasizing.

Field Trips

Starting in kindergarten numerous field trips are made. Visitations are made to such business places as the fire station, library, police station, farms, bottling plants, professional offices, floral shops, grocery stores, westinghouse, telephone company, Kansas Power and Light, etc.

Field trips are scheduled according to the interests of students at different grade levels. A wide variety of businesses and occupations are explored as the students progress through the grades K-12.

Guest Speakers

Numerous guest speakers are used in both the elementary and secondary schools. Included in the group have been grocers, political candidates, floral workers, medical technologists, lawyers, doctors, veterinarians, clothing store operators, truck drivers, legislators, etc. Again, the speakers gear their discussions to the particular grade level of the students to whom they are speaking.

Special Units

In the primary grades several specific units are directed to community workers. This study is expanded as students progress through to the intermediate grades and to the secondary schools. Examples of special units at the elementary level are: Safety and Health Units, Food Production, Home Building, Economic Education, Ecology, Archeology, Choosing Your Career, etc.

At the secondary level numerous units in a variety of subjects stress career education. A Title III grant, utilizing the periodical, "Search", which relates to various aspects of career education, is used at the junior high level. A course in vocations is taught and primarily designed for freshmen. The course explores the educational and training opportunities open to the individual, the relationships between schools, subject and careers, and an overview of the world of work and tomorrow's jobs.

Projects

Publication of newspapers, writing creative stories or subjects such

as "What I Would Like to Be When I Grow Up," doing creative art projects, participation in "Career Day", open house at SAVTS etc., are just a few of the projects carried out concerning career education.

Programmed Materials

Some programmed materials on career education are already available for us in Salina. Education Achievement Materials, film and filmstrips, and Cable TV are some of the materials currently in use. Additional material is currently under study.

Resource Materials

Resource material consists of (a) books, (b) magazines, (c) tapes, (d) slides, (e) sound film, and (f) picture files. These materials are available in individual schools as well as through the Instructional Materials Center.

Hands on Projects

By nature of their title and content, such regularly scheduled classes as home economics, shop, auto machines, drafting, agri-business, marketing and distribution, clothing, office occupations, and other trade and industry courses deal with career education. Over fifty courses are offered at the senior high level and several are offered at the junior high level.

Included in the "Hands On Projects" would be the offerings at the Salina Area Vocational Technical School as well as the special vocational program for handicapped students.

Development of Salable Skills

Current programs in office education, distributive education, work experience, agri-business, trades and industry, plus the courses at SAVTS

offer students in the Salina schools numerous opportunities for actual development of salable skills.

Attached is a sheet which lists the curriculum of the high school in the world of work. As pointed out early in this summary, a considerable number of other activities which relate to career education are carried out K-12 in the Salina schools.

Plans for the Future

At present, career education means many things to many people. The above summary reveals some of the activities being carried out in our schools at present. Perhaps the next step ought to be discussion and action on some of the following:

1. A definition of career education as it relates to Salina.
2. Development of a philosophy of career education as it relates to Salina.
3. Establishment of definite goals for career education.
4. Amount of community support which can be expected.
5. General areas of responsibility of various groups within the community.

FINAL REPORT

Project No. 554AH50323

Grant No. 6007603905

Career Education

Region III

Project Facilitator, Ms. Kaye Chapple

Wichita

The Project reported herein was supported by a grant from Career Education Programs, U. S. Office of Education. The opinions expressed in this publication do not necessarily reflect the position of the Office of Education and no official endorsement should be inferred.

Mr. Ken Best, Director
Region III

July 1, 1975, to June 30, 1976

Wichita

Region III is the south central part of Kansas. It consists solely of Unified School District 259, Wichita. It is considered to be an urban school with an enrollment of 51,907. Its pupil population represents 1/8 of all the students enrolled in the public schools of Kansas. Ms. Kaye Chapple is the facilitator. Because of the complexity and size of the school system, Kaye's work has been confined almost exclusively to the seventy-nine elementary schools.

Accomplishments

During the 1974-75 school year, only eight elementary schools were involved in the career education program. Teachers from these schools participated in a pilot project which involved using and evaluating the Career Education Activity Kits (C.E.A.K.). This project was directed by Ken Best, coordinator of Career Education in Wichita. No other elementary programs or services existed in career education at that time.

This year, 1975-76, Kathy Wilson and I were hired as career education facilitators through federal funding by E.S.A.A. and Title IV, respectively. Each of us works with fourteen schools on a regular basis for the purpose of assisting teachers in developing and implementing career awareness activities.

The beginning of the year required the identification and testing of the treatment and control samples for the evaluation design. Some 150 tests were administered in this process. Simultaneously 168 teachers and 5 administrators participated in a worksnop designed to inservice the participants in the use of the Career Education Activity Kit's elementary program.

In addition, 60 junior high school teachers of mathematics, science, social studies, and language arts were involved in an intensive two day awareness and "how to" inservice. This base of teachers formed a nucleus of ten

teachers in each of six junior high schools who are career educators. This junior high nucleus of trained teachers, coupled with the elementary career educators trained, provided the basis for most of the project's activity.

1) Resource Exchange and Clearing House (REACH)

The establishment of the Resource Exchange and Clearing House (REACH) for Wichita teachers proved to be instrumental in getting the school and the community together. The REACH program provides a central clearing house for teachers who wish to utilize a community resource whether a field trip, guest speaker, exhibit, or demonstration. In calling, the teacher explains what type of resource is needed and the objectives to be met from the utilization of the resource. The secretary contacts the appropriate REACH resource, works out the details, and then returns the information to the teacher requesting the service. If the desired resource is not currently a member of the REACH program, the Career Education staff solicits participation from additional community members.

The resource and the teacher/students evaluate each other in an effort to monitor the preparation of the students for the community experience and to identify resources that need some aid in working with students. Another service that is beneficial to the resources is that their contact with the school system is always with the same person. As a result, the resource does not need to explain company policy or available locations, etc. with each contact. Further, resources can control their participation by indicating from the beginning that they will participate only in certain ways or a limited number of times. When the limited number of participations is reached, the resource is contacted and a hold is put on that file until the next period of participation.

The service to teachers is extremely valuable. They no longer need to spend time searching for a resource that meets their educational objectives. One phone call and the rest of the task is that of the REACH program. The REACH file is growing continuously and presently has over 250 community resources available to Wichita educators.

2) Consulting/Monitoring

As a requirement of both the elementary and junior high inservice, the participants were asked to infuse a minimum of fourteen hours of career education into their curriculum. This implementation required written documentation with at least two of the fourteen hours being observed by the career education staff. This policy enabled the career education personnel to monitor the extent to which the initial inservice was impacting students in the classroom. Subsequently, there were only three teachers who assessed the inservice who did not complete their implementation obligation.

Because of the visibility of the career education staff in the schools created by the monitoring procedures, other teachers began seeking assistance in career education for their students. These requests for consultative services were also stimulated by the REACH program and student demand. Teachers' success in motivating non-responsive students through career education also enhanced the career education effort in the junior high schools.

3) Delivery System

The system for delivering career education in Region III revolves around three basic components: awareness, inservice, and support. Awareness refers to the need for career education and the philosophy guiding its

development. This activity is initiated at school staff meetings and continued with a newsletter.

Teachers who wish to pursue career education can enroll in an inservice designed to further their level of awareness about career education and foster a commitment to the concept. Teaching techniques and infusion ideas are demonstrated, explained, and simulated for teachers during the workshop.

Support is then provided through the REACH program, consultant demonstration and advice, and multi media career education materials. Co-planning and resource balance became an effective means of changing teacher behavior to include career development as a natural component of their curriculum. New ideas for career education activities, continued articles supporting career education, and monthly updates of the REACH program are included in the monthly newsletter as another means of supporting the dissemination of career education.

In utilizing this approach to the implementation of the project, a determination was made that it is better to initiate career education in a manner that best enables the process of awareness, inservice, and support to occur. In the long run it is not efficient to make more teachers aware of the need for career education if inservice cannot be provided to meet the created demand. Similarly, to inservice more teachers than can be given support would be detrimental to the entire effort. Subsequently, there is a large group of trained personnel who are committed to career education, who can now receive less support, and who will in fact provide support to their colleagues as we move to expand in the future.

4) Career Education Task Force

An advisory group of representatives from each of the occupational clusters, labor, and parents were organized this past year. The Career Education Task Force has been instrumental in the development of the REACH program and other community based career education efforts in Wichita. Task Force members are anxious to continue working with the career education office as we continue to improve the quality of the education provided our youth.

Future

We are currently making presentations during faculty meetings at the remaining fifty (50) elementary schools to inform teachers about our career education program and the August, 1976 inservice workshop. Our goal for 1976-77 is to have teachers in all Wichita elementary schools involved in career education.

FINAL REPORT

Project No. 554AH50323

Grant No. 6007603905

Career Education

Region IV

Project Facilitator, Mrs. Sally DeMoss

Erie

The Project reported herein was supported by a grant from Career Education Programs, U. S. Office of Education. The opinions expressed in this publication do not necessarily reflect the position of the Office of Education and no official endorsement should be inferred.

Ms. Janet Perron, Director
Region IV

July 1, 1975, to June 30, 1976

ERIE

Region IV is located at Erie in the southeast part of Kansas. It is composed of nine counties and twenty-eight USD's. It is governed by a Vocational and Career Education Service Unit. Mrs. Sally DeMoss is the facilitator.

Accomplishments

The following is a list of activities that were accomplished by Regional IV.

1) Conducted an inventory of career education activities and community resources within the region.

In Region IV the regional facilitator has cooperated with the two career education coordinators in USD #250, Pittsburg, and the Montgomery County Career Education Consortium's coordinator in identifying outstanding activities that have occurred or were in planning stages within their projects.

A regional community resource file has been developed for my region. Approximately 2,000 surveys were mailed to businesses in the nine-county area in the summer of 1975, asking for volunteers to act as resource people or to provide field trip sites for school districts in their county. Some responses were returned by mail while more people were enlisted through telephone contact and on-site visitations. A final total of 192 resource people with most providing field trip sites was the result. This information was compiled by county and distributed for school use. Also contained in the regional resource file is a media equipment and supply survey summary from 14 of the 28 USD's in the region.

2) Identified and compiled information on successful career education practitioners in the area and assisted local career education facilitators.

By working with the three career education coordinators in the region, I identified six career education practitioners in Pittsburg, two in Cherryvale, three in Independence, and one in Coffeyville. This list is by no means complete because there are many outstanding teachers who are integrating career education within the two existing projects. These teachers have been inserviced and trained in career education through their own project workshops and by their career education coordinators.

Four teachers in Iola were also noted for implementing career education. These teachers had been inserviced through a Title III program that provides career exploration experiences for students from the three high schools in the county, the Allen County Team for Individualized Occupational Needs (ACTION).

By visiting schools throughout the region, I have worked with and observed career education practitioners in Riverton, Columbus, Erie, and Girard. I invited these teachers to career education conferences held in the state. Five individuals attended a Career Education Conference in Colby January 17 with me, and then two more attended another Career Education Conference in Kansas City on February 28. Most of these teachers have had an introductory three-hour course in career education concepts offered by Kansas State College of Pittsburg.

3) Conducted career education workshop.

On March 25, 1976, I held a Career Education Conference for area administrators to better acquaint them with career education and to determine what particular barriers existed in their school districts to implementing a career education program. Dr. Bertram Caruthers, Assistant Superintendent of USD #500 in Kansas City, was the keynote speaker, but the Kansas

Commissioner of Education, Merle Bolton; the state Career Education Specialist, Patrick Garzillo; and this federal project's coordinator, Hazel Rockhold, also addressed the group of 27 school administrators. Workshop participants completed a questionnaire in which they ranked specific items in order of greatest need (i.e., philosophy and definition, school board orientation, staff orientation, planning model, identifying needs, setting goals and objectives, defining staff roles, inservice for staff, infusing program into the curriculum, begin with a pilot program, demonstration of materials, guidelines for materials selection at all levels, consultant services from the State Department of Education, evaluation, and other). They also responded to questions asking how the regional facilitator and state staff could help meet these needs, if their staffs are available for career education inservice, how many inservice days are in their school calendar, and how the regional facilitator could better serve their schools. This information provides a basis on which to plan an appropriate course of action in each school situation.

I also conducted 12 inservices for 112 teachers. These were held after school hours and were not scheduled as part of an inservice day within a school. Due to these circumstances, the inservice was approximately an hour in length and dealt with the use of community resources, career education materials, and activities to reinforce learning. The following districts were involved:

USD	NO. HELD	NO. OF TEACHERS	STUDENTS
508	3	26	
101	2	5	40
447	1	5	
505	1	17	
404	1	15	
387	4	32	40
SEK AVTS, Columbus	1	11	
	13	111	80

The regional facilitator assisted 30 individual classroom teachers in their schools with the development of teaching units by providing ideas, information, printed materials and/or audio-visual materials. Sometimes assistance was requested; at other time, I initiated the meeting to suggest activities or the use of some material. In most cases there were multiple contacts made. Those districts affected were:

USD	NO. OF TEACHERS
387	3
508	4
445	3
248	3
246	1
366	1
101	4
404	3
493	2
503	1
504	1
257	2
SEK AVTS, Columbus	2

The following school districts utilized either printed curriculum materials or audio-visual materials through the regional facilitators's.

USD
404
493
503
504
505
508
366
387
461
436
445
446
447
101
413
234
257
248
250

4) Compiled data for developing guidelines for carrying on career education, including costs, etc.

The regional facilitator has available all information from the State Department of Education concerning career education projects that have been conducted or are operating in the State of Kansas. This includes guidelines for the process of implementing, costs incurred, the types of assistance that are available, recommendations on career education materials and equipment, sources of aid, etc.

I have developed a file of sources for commercially produced career education materials. This information has been used to locate materials that develop competencies in an identified area of need, the cost, and where these materials are available. In order to make recommendations on the possible purchase of materials, I have previewed many of these materials or located someone who has used these materials to provide this type of evaluation.

5) Organized and arranged for meetings of a regional consortium career education advisory committee

In October, 1975, eight people were selected to act as a regional consortium career education advisory committee. These individuals were personnel directors of major industrial employers in the region, with one representative from the one four-year college in the area.

There has been one meeting of the advisory committee (held on December 1, 1975). At this time an overview of career education was presented by a film. A discussion followed that indicated current problems in education and possible strategies to overcome these problems. Their support to encourage career education in their local school districts and promote the cooperation of business and industry with education was enlisted.

Regional Status of Career Education

A. School districts within our region.
B. Persons responsible for career education in each district.

A		B
Altamont	USD #506	
Arma	USD #246	Pat Tassey
Baxter Springs	USD #508	Norma Blankenship
Caney	USD #436	Lyle Leland
Chanute	USD #413	Ray Zumalt
Cherokee	USD #247	
Cherryvale	USD #447	Lyle Leland
Chetopa	USD #505	
Coffeyville	USD #445	Lyle Leland
Columbus	USD #493	
Erie	USD #101	LeNoir Rowland
Fort Scott	USD #234	
Fredonia	USD #484	
Frontenac	USD #249	
Galena	USD $499	Melvin Hayward
Girard	USD #248	Dorthea Majors
Humboldt	USD #258	
Independence	USD #446	Lyle Leland
Iola	USD #257	Tom Wheat
Marmaton Valley	USD #256	Harold Norris
Neodesha	USD #461	
Oswego	USD #504	
Parsons	USD #503	
Pittsburg	USD #250	Mary Remington

Riverton	USD #404	Wynona Stout
Uniontown	USD #235	
Yates Center	USD #366	
Altoona-Midway	USD #387	George Stewart

Altamont USD #506--I have not conducted any inservice or worked with any teachers in this district. They have many vocational offerings at the high school, but are not really interested in career development.

Altoona-Midway USD #387--I have conducted four inservice sessions in this district and worked individually with three teachers. There is positive feeling at the administrative level for career development, as evidenced by a career development coop program at the high school level. They should be ready to begin a program.

Arma USD #246--I haven't been involved in any inservice in this district nor assisted any teachers. The high school counselor has a fine career guidance program at the high school. There is very little interest in the district concerning career education. The administration feels it is already doing career education.

Baxter Springs USD #508--I had three inservices at the elementary level. There is some interest at the administrative level, but limited teacher interest. They are utilizing some materials from my office.

Caney USD #436--Caney is presently a member of a career education consortium and is well into implementing career education. They are using career education materials from my office.

Chanute USD #413--I have not worked personally in this district, but there is

administrative support for career education and many teachers are conducting career activities and utilizing career education materials from my office.

Cherokee USD #247--I have not worked in this district but there is minimal interest in career education.

Cherryvale USD #447--This district is a member of the Montgomery County Career Education Consortium. They are implementing career education at nearly all levels. I conducted one inservice and they are using materials from this office.

Chetopa USD #505--This is an extremely poor school district. I conducted one inservice and they have utilized materials from my office.

Coffeyville USD #445--Coffeyville is in the Montgomery County Career Education Consortium and is starting to implement career education at all levels. This is a large district and it is taking time to involve a majority of the teaching staff. They are using career education materials from my office.

Columbus USD #493--There is administrative level support for career education but no real commitment has developed. Some teachers are implementing activities and using materials from my office. They are purchasing Career Education Activity Kits at the elementary level for next year.

Erie USD #101--I have held two inservices in this district, and teachers are using materials from my office. Project Discovery materials are being used and Career Education Activity Kits and the second set of Project Discovery are being purchased at the elementary level. There is no very strong teacher in the school that supports career education and is enlisting support at all levels.

Fort Scott USD #234--Materials from my office are being used at the elementary and junior high levels. The superintendent recognizes the need for career education but hasn't developed any kind of commitment as yet.

Fredonia USD #484--Fredonia is in a career education coop that provides a career development program at the high school level. I have not worked in this district, so I'm not able to comment on the status of career education in the district.

Frontenac USD #249--Most teachers in this district have been inserviced in career education through Kansas State College of Pittsburg, but little progress has been made toward implementing career education. The superintendent feels most student needs are met by current curriculum.

Calena USD #499--This is a very poor district and there has not been a district wide effort to implement career education. The high school counselor is trying to assist and direct teachers in his building to implement career concepts in their teaching.

Girard USD #248--This school has done much in implementing a career development program at the high school. Next year they plan to use Project Discovery at the junior high and Career Education Activity Kits at the elementary level. The superintendent feels career education is good for his students. Materials from my office were utilized.

Humboldt USD #258--This school is in a coop that provides a career guidance program for high school students. Interest is developing at the elementary level with a guidance counselor to help implement career education there.

Independence USD #446--This school is a member of the Montgomery County Career

Education Consortium and is really beginning to implement career education at all levels. I was involved in one workshop for the junior high English department to develop curriculum.

Iola USD #257--This school is a member of the Allen County Coop that provides a career guidance program for high school students. There has been inservice at the elementary level, and there is district wide interest in career education. They have utilized materials from my office.

Marmaton Valley USD #256--They are in the Allen County Coop also and included a career guidance program. The superintendent supports career education, but it has not been integrated into the total school program.

Neodesha USD #461--This school is in a coop that provides a career development program at the high school level. some activities are on-going at the elementary level, but I have not spent time in this district so I can't really evaluate the status of career education at this time.

Oswego USD #504--The district is just beginning in view career education as a possibility. There is support from two high school teachers and one elementary principal. My materials have been used at the secondary level.

Parsons USD #503--This district has been slow in moving toward career education. Next year career education will have one day of inservice devoted to it at the high school and Career Education Activity Kits are being purchased to pilot in one of the grade schools.

Pittsburg USD #250--Pittsburg has had an excellent exemplary career education project for the past three years which was based upon curriculum infusion. Next year there will be K-9 coordinator but they are dropping it at the high school level.

Riverton USD #404--There are many activities and innovations in career education at the elementary and high school levels. There is very strong support for career education at all levels. They have utilized many materials from our office and are purchasing Career Education Activity Kits for next year.

Uniontown USD #235--Interest has been minimal in this district but the new superintendent has expressed a desire to get involved in career education next year.

Yates Center USD #366--This district is in a coop that provides a career development program for high school students. A developmental elementary career education program was started this year.

Future

The federal project helped disseminate career education ideas, activities, and materials through Region IV. By promoting career education through personal contact, inservice, and newsletter, there is greater awareness on the part of school personnel of what career education aims to accomplish, current successful practices, and what types of assistance are available. Many schools outside of other career education projects have some types of career related activities occurring as a direct result of this project.

I have decided that district commitment is essential for the development and continuation of a career education program. It is vital that responsibilities within a school district's program be defined, so that the regional facilitator has someone to work with in all situations. There are too many school districts, teachers, and students within a region to work effectively on an individual basis. One person within a district or school helps

facilitate the dissemination of information, materials, and ideas, in addition to providing necessary feedback.

Time also must be provided for necessary inservice training and for program development. Both are vital aspects of career education and the utilization of teachers' free time is an ineffective method of handling these two activities.

The majority of districts in my region would not have any type of career education services available to them without the federal program. The support for career education and dissemination of information and materials would be a handicap to classroom teachers and to school districts that are considering initiating a total program. Though there are several projects in the region there is very little communication or exchange of ideas at the teacher level. There is little knowledge of curriculum planning and development between the districts. There is a real need for a supportive force for school districts in the area of career education.

FINAL REPORT

Project No. 554AH50323

Grant No. 6007603905

Career Education

Region V

Project Facilitator, Mrs. Sharon Sloan

Kansas City

The Project reported herein was supported by a grant from Career Education Programs, U. S. Office of Education. The opinions expressed in this publication do not necessarily reflect the position of the Office of Education and no official endorsement should be inferred.

Dr. Jack Flint, Director
Region V

July 1, 1975, to June 30, 1976

KANSAS CITY

Region V of the Federal Career Education project is the northeast region of the state of Kansas. This region encompasses twelve counties and forty-seven unified school districts. The Region V coordinator was hired in August of 1975 and is based in Kansas City at the Kansas City Kansas Community College.

Accomplishments

The following is a list of activities that were accomplished by Region V.

1) Conducted an inventory of Career Education activities and community resources in the region:

Three of the forty-seven school districts within Region V have strong on-going Career Education programs and as a total make up 58 percent of the total public school population within Region V. These three school districts are: 1) Kansas City, Kansas -- Unified School District #500; 2) Lawrence -- Unified School District #497; and 3) Shawnee Mission -- Unified School District #512.

The Kansas City, Kansas district's program began in February of 1971 as the urban setting for the "Urban, Rural, Suburban Career Education Project" under the direction of Dr. Bertram Caruthers. The program was a success to the degree where it has been continued under local district funds. Dr. Caruthers' Career Education Program is now coordinated (through his direction) by two people, Mrs. Valera Dixon, who is the elementary program specialist, and Mr. Ed Crabtree, who is the secondary project specialist. Both of these people are highly qualified for their jobs and have worked very closely with the Region V facilitator during the past year's funding.

Dr. Caruthers' Career Education program is also responsible for V.E.E.P. which is the title that has been given to the Career Education resource center

for the Kansas City, Kansas District. During the period of funding, Dr. Caruthers' staff developed two handbooks of suggested Career Education activities to be used by teachers in their classrooms. Both handbooks are for the elementary level. One is for kindergarten through third grade and the other for fourth grade through sixth grade. Both of these handbooks have proved to be very useful tools in beginning Career Education activities. The original Career Education Staff at V.E.E.P. also helped in developing a series of filmstrips and cassette tapes on various occupations for classroom use on all the various grade levels.

The major part of the in-service training for this program has been the college credit course which is still offered to all teachers, administrators, and counselors within Unified School District #500 and anyone else in the surrounding area who would like to take the course. The course is taught by Dr. Caruthers at the Kansas City Kansas Area Vocational-Technical School and gives three hours college credit. The Career Education handbooks of suggested activities, filmstrips, and cassettes, and a large number of various handouts covering many areas of Career Education are all disseminated to the class during the course. Over 900 teachers, administrators and counselors have taken the course which is designed to help them with ways in which career alternatives and awareness can best be passed on to their students.

Coordination services offered by Mrs. Dixon and Mr. Crabtree include contacting and arranging for resource speakers from the community, aiding teachers in planning and organizing such activities as field trips and Career Fairs, assisting teachers in the development of any new activities related to Career Education curriculum materials and helping teachers in the development of ideas brought out in Dr. Caruthers' Career Education class.

The Lawrence program began in 1970 as the suburban setting for the "Urban, Rural, Suburban Career Education Project." This program was also a success to the degree that it has been covered by local district funds. The coordination of Career Education activities was at first left up to the regular staff persons, but in 1974-75, a regular coordinator was hired for this purpose. Mrs. Ashby is now the Career Education Consultant for the Lawrence Unified School District for all levels, kindergarten through twelfth grade. Mrs. Ashby's coordination services are very similar to those of Mrs. Dixon and Mr. Crabtree in the Kansas City, Kansas School District. Her file of resource speakers from the community is very impressive in that they (the community people) are very willing to be involved in the educational system and are called on quite frequently. Mrs. Ashby is also working on a project with her secondary teachers where they are developing curriculum materials to be used throughout the state for Career Education. Every basic high school subject area will be included. Mrs. Ashby's program is very strong as evidenced by the number of people involved in Career Education in the Lawrence area.

The Shawnee Mission program has been designed for the secondary level of education and unlike the other two programs, was not originally started with the assistance of any federal funds. The program activities consist of a two-week career seminar which was originally designed for tenth grade students but has also been used to meet the needs of the district's juniors and seniors. The ten-day seminar is a developmental process of career exploration that allows the students a systematic investigation of career areas and an evaluation of those facets of self that are essential to making career decisions. The program was developed by Mr. Bill Studyvin and his staff and is located in four of the five Shawnee Mission high

Linwood -- Unified School District #458. The Project Facilitator conducted workshops in all three of these districts during the fiscal year of 1975-76.

3) Assisted in developing a regional plan of action for expanding Career Education including each local school's plans:

The coordinator organized three Career Education administrator's meetings where meeting objectives included the following:

1. To introduce the Federal Career Education Project personnel and describe the project objectives.
2. To describe the services available to each school district through the facilitator. (In-service workshops, in-service dissmenination of Career Education materials, etc.)
3. To introduce contact people from the on-going Career Education programs in Region V (the Kansas City, Kansas, Lawrence and Shawnee Mission programs) and to have a person from each of these unified school districts in the area of resources and suggested activities which they would be willing to share.

The meetings were held on three different dates, at three different locations. All 47 Unified School Districts were invited to attend one of the locations that was most convenient for them to attend. Ten Unified School District Administrators were invited to attend the Career Education dinner in Atchison. This portion represented the northern district of Region V. The central district of Region V was represented by twenty-two administrators who were invited to the Career Education luncheon in Kansas City. Twelve administrators were from the southern district of Region V to attend the Career Education dinner meeting held in Paola.

The Atchison meeting was held in December where Mrs. Mary Ashby from Lawrence, Mrs. Barbara Evans from Shawnee Mission, and Mrs. Valera

Dixon from Kansas City, Kansas were available to describe each of their respective programs and the ways in which they would be able to assist the Region V facilitator in disseminating these individual Career Education materials and information.

The November Kansas City, Kansas meeting presentations were by Dr. Bertram Caruthers from Kansas City, Kansas, Mr. Bill Studyvin from Shawnee Mission, Mrs. Mary Ashby from Lawrence, and Mrs. Hazel Rockhold, the Federal Career Education Project Director. Mr. Ed Crabtree from Kansas City, Kansas, Mrs. Barbara Evans from Shawnee Mission, and Mrs. Mary Ashby from Lawrence gave presentations at the administrator's meeting in Paola which was held in December.

4) Assisted in the planning of in-service sessions to provide needed competencies for developing Career Education:

   a) Three Career Education Administrator's meetings.

   b) Regional Career Education Conference.

The first Career Education Regional Conference for Region V was held in February of 1976. Invitations were extended to all teachers, administrators, and counselors from the forty-seven unified school districts that did not have Career Education activities. Twenty-four unified school districts were represented at the conference by an attendance of approximately 125 educators. The twenty-two speakers included counselors, teachers, administrators and various Career Education project personnel from across the state.

   c) Three district-based Career Education workshops.

5) Compiled data for use in developing guidelines for carrying on Career Education, including costs, etc.:

The compilation of data is recorded in the Region V Resource Inventory. A possible way to carrying on Career Education without federal funds would

be to establish three geographical district-based Career Education resource libraries supplied by local school district funds.

6) Cooperated with the state coordinator in the Career Education network.

7) Organized and arranged for meetings of a regional consortium Career Education Advisory Committee.

On December 8, 1975, the Region V facilitator corresponded with all Unified School Districts and requested recommendations for individuals to serve on the Regional Consortium Career Education Advisory Committee. In the request, the facilitator specified that the recommended person be a representative of the community's business/industry, labor or parent group and preferably not someone involved in education such as a teacher or administrator. Six persons were recommended from the forty-seven unified school districts. Three of these six were submitted after the Region V Conference on February 28. This delayed and minimal response from the unified school districts convinced the Region V facilitator that a meeting of the Regional Consoritum Career Education Advisory Committee during the fiscal year of 1975-76 would not affect any Career Education programs initiated during the 1975-76 school year. Should the Career Education program be funded for the fiscal year of 1976-77, an effort will be made to increase the committee membership and to meet once every two months. The Region V Task Force formed in September of 1975 was able to successfully assume the responsibilities originally to have been assigned to the Regional Consortium Career Education Advisory Committee.

Members of the Region V Task Force:

Mr. Bill Studyvin - Shawnee Mission, Unified School District #512

Mr. Dick Nelson - University of Kansas

Mrs. Mary Ashby - Lawrence Unified School District #497

Mr. Dick Burns - Johnson County Community College

Dr. Burtram Caruthers - Kansas City, Kansas Unified School District #500

Mr. Dale Myer - Kansas City, Kansas Area Vocational-Technical School

Mr. Charles Johnson - Kansas City, Kansas Community College

Dr. Jack M. Flint - President, Kansas City, Kansas Community College

STATUS OF CAREER EDUCATION

COUNTY	U.S.D. #	LOCATION	TOTAL # OF STUDENTS
Brown	415	Hiawatha	1,233
	430	Horton	722
	510	Powhattan	299
			2,184 Total
Doniphan	406	Wathena	584
	425	Highland	377
	429	Troy	524
	433	Denton	286
	486	Elwood	313
			2,084 Total
Atchison	377	Effingham	1,161
	409	Atchison	2,266
			3,427 Total
Jefferson	338	Valley Falls	544
	339	Winchester	519
	340	Meriden	803
	341	Oskaloosa	493
	342	McLouth	548
	343	Perry/LeCompton	1,021
			3,928 Total
Leavenworth	207	Ft. Leavenworth	2,330
	449	Easton	698
	453	Leavenworth	4,754
	458	Basehor/Linwood	1,188
	464	Tonganoxie	1,331
	469	Lansing	1,167
			11,468 Total
Wyandotte	202	Turner (Kansas City)	4,730
	203	Piper (Kansas City)	800
	204	Bonner Springs	2,421
	500	Kansas City	29,884
			37,835 Total
Douglas	348	Baldwin City	955
	491	Eudora	835
	497	Lawrence	7,652
			9,442 Total

*Information taken from the Kansas Educational Directory - '74-'75 Bulletin 340.

COUNTY	U.S.D. #	LOCATION	TOTAL # OF STUDENTS
Johnson	229	Stanley	1,450
	230	Spring Hill	1,165
	231	Gardner	1,461
	232	DeSoto	1,782
	233	Olathe	5,585
	512	Shawnee Mission	41,490
			52,933 Total
Franklin	287	Pomona	810
	288	Richmond	597
	289	Wellsville	812
	290	Ottawa	2,449
			4,668 Total
Miami	367	Osawatomie	1,302
	368	Paola	1,779
	416	Louisburg	963
			4,044 Total
Anderson	365	Garnett/Edgerton	1,440
	479	Kincaid/Crest	387
			1,827 Total
Lin	344	Pleasanton	405
	346	Mound City	629
	362	LaCygne/Prairie View	849
			1,883 Total

REGION V -- TOTAL NUMBER OF STUDENTS 135,723

TOTAL NUMBER OF UNIFIED SCHOOL DISTRICTS 47

USD #231 - Gardner/Edgerton:

Mr. Robert Ledom, Curriculum Coordinator.

Workshop to involve grades kindergarten through twelfth - teachers, administrators, and counselors.

Total: 55

Mr. Ledom said that USD #231 has had no Career Education until now and he would like the elementary teachers to work with it first.

USD #479 - Kincaid:

Mr. Carl Otto, Superintendent of Schools.

Workshop to involve grades kindergarten through twelfth, entire school district.

Mr. Otto said that several of their teachers have taken the Career Education course offered through Pittsburg, but they have not yet worked with the program in the classroom. He would like to see Career Education involvement on all levels in his district. He really likes"...bringing back relevance to the classroom."

USD #348 - Baldwin City:

Mr. Gordon Wakeman, High School Principal.

Workshop to involve the secondary level only, ninth -- twelfth, teachers, administrators, and counselors.

Mr. Wakeman feels that Career Education can be great for USD #348. Right now there are too many outside activities (sports, etc.) and studens are forgetting the real reason for coming to school. Also

the curriculum is too college preparatory. Mr. Wakeman would like "to make school more relevant -- especially in the academic classes."

USD #338 - Valley Falls:

Mr. John H. Todd, Superintendent of Schools.

Workshop to involve the entire school district, kindergarten through twelfth -- teachers, administrators, and counselors.

Total: 36

Presently, no program in Career Education.

USD #458 - Basehor/Linwood. (August 25, 1976)

Mr. Richard McVay, Elementary School Principal.

Workshop to involve teachers, administrators and counselors, kindergarten through twelfth.

Total: 53

The elementary section of the August 25, 1976, workshop will be run as a follow-up to in-service meeting held in January of 1976. Mr. McVay and Mr. Walt Meyer (superintendent of schools) attended every meeting concerning Career Education during the first year of this project and displayed a great deal of interest in initiation and implementation of Career Education activities within their district. Presently, the district is involved in several vocational programs: World of Manufacturing, grades 7-8; Vocational Home Economics, grade 8; combination Cooperative Vocational Education Program, grade 12; and Junior College and A.V.T.S. programs, grade 12. Mr. Meyer would like some "suggested activities" for the special education teacher made available at the workshop.

USD #202 - Turner (Kansas City, Kansas)

Mr. Steve McClure, Curriculum Coordinator.
Mr. Carl Handon, Curriculum Coordinator.

Work shop to involve only Junior High teachers and counselors.

Total: 70

Mr. McClure has been working with the entire faculty on a project concerning self-concept quite intensively during the past year. The project has involved quite a bit of testing and evaluations. The district has developed an interest in Career Education, but are not ready to make any type of commitment. Each Junior High and Senior High has a K-view projector. Each library has a hard-copy printer.

USD #429 - Troy.

Mr. Nick Dannevik.
Mr. Jess Gilstrap, High School Principal.

Workshop to involve the entire school district, kindergarten -- twelfth, teachers, administrators, and counselors.

Total: 50

Special concentration of the Junior High level.

Mr. Gilstrap is very enthusiastic about Career Education, and has attended several Career Education workshops throughout the state. He found the workshop in Wichita most impressive during the spring of 1975, when Mrs. Mary Kosier gave a presentation on Discovery Packets. Mr. Gilstrap is very anxious for a Career Education program to develop and involve all areas of teaching. Mr. Gilstrap attended the Regional Career Education Conference for Region V and thought that it was very worthwhile and..."hopes there will be another one

next year." He suggested that slide presentations giving an overview of other programs would be very helpful and informative and would save money spent traveling to visit these programs. Other helpful suggestions were offered to the facilitator for possible inclusion in the next conference or even the fall of 1976 district-based workshops.

USD #510 - Powhattan.

Mr. Gerald L. Marshall, Superintendent of Schools.

Workshop to involve all teachers, administrators and counselors, kindergarten -- twelfth.

Total: 26

Presently, USD #510 has no program in Career Education. The district is anticipating being funded $15,000 for development of Career Education. (Refer to the back of Powhattan questionnaire in Appendix D.) Mr. Marshall is very anxious to see what can be worked out during next year. He is sold on Career Education and sees it as being a possible answer to some of their problems.

USD #344 - Pleasanton:

Mr. Don German, High School Principal.

Workshop to involve Junior and Senior High teachers and counselors. Special emphasis on practical approach to implementing Career Education.

Presently, there is no Career Education program.

USD #229 - Stanley:

Mr. Larry Dwyer.

This workshop has not yet been discussed. Please refer to the Stanley questionnaire for more information.

USD #343 - Perry:

Mr. James McMahan, Superintendent of Schools.

Workshop has not yet been discussed. Please refer to the Perry questionnaire for more information.

Future

Constructive suggestions for the overall improvement of implementing Career Education during the 1976-77 fiscal year in Region V:

1. Intensive district-based in-service meetings with as many of the forty-seven unified school districts as possible (excluding Kansas City, Kansas, Lawrence, and Shawnee Mission.)

   General program outline:

   a. Concept of Career Education
   b. In-servicing in the use of Career Education materials.
   c. Develop slide presentations on successful approaches to the implementation of Career Education from various programs across the state. This would save money and time normally spent on visiting these programs.

2. Distribution of Career Education materials purchased by the year's budget to unified school districts that would like to use them - eventually setting up resource centers in each of the three districts of Paola, Kansas City, Kansas, and Atchison. The materials could be checked out by designated unified school districts in the areas surrounding these three districts, who have demonstrated a committment to implementing Career Education.

(District consortiums might provide monies to purchase more materials.)

3. Newsletter for Career Education in Region V that would be mailed monthly to all forty-seven unified school districts.
4. Second Annual Regional Career Education Conference for Spring 1977 -- possibly three conferences instead of one could be based in the three major geographical districts, north, central and south.
5. Regular meetings with the Regional Consortium Career Education Advisory Committee eventually composed of one member from each of the forty-seven unified school districts. The main purpose of the committee will be to help the coordinator's efforts in establishing community-business support and to provide lists of resource people from the various areas who will allow area schools to call on them.
6. Arrange for regular meetings once a month for all District Career Education Coordinators (school personnel in each unified school district that have been assigned Career Education coordination responsibilities) to discuss ideas and information, and share materials that may be helpful to each other.
7. Perpetual Evaluations on materials, workshops, the facilitator's services. Evaluation forms could be sent out at the beginning of each semester.
8. Schedule follow-up workshops or meetings for questions and evaluations.
9. Workshops for the district Career Education coordinators that work with the project facilitator.

a) Provide the more interested counselors with V.E.G. training paid for either partyly or entirely with Federal funds ($85.00 each.)

b) Provide the more interested teachers with the C.E.A.K. (elementary) and Discovery/Explore (junior high) workshops training held in Newton and Wichita.

10. Regular part-time secretary. (If federal funds would allow, the position could be a full-time one in which the person served half-time as a secretary and half-time as an assistant to the facilitator. This would be most helpful since Region V has no staff assistants.)

11. During the late summer and early fall the facilitator should meet personally with each unified school district administrator in his or her office.

EVALUATION

The evaluation report provides information regarding the evaluation of the Exemplary Project to Demonstrate Transporting Career Education Techniques for the Kansas State Department of Education during 1975-76. The primary goal of the project was to implement a comprehensive state-wide career education program which involves all facets of education. The two major objectives of the career education project were 1). to determine the effectiveness of using successful career education practitioners from the field in providing prospective teachers with an understanding of career education concepts as related to teaching responsibilities and 2). to demonstrate and compare the effectiveness of delivering career education activities through the use of five different organizational bases.

The process objectives of the project as stated in the proposal for funds were as follows:

1. Conduct an assessment of career education programs in five regions.
2. Develop a guide for planning and implementing career education.
3. Conduct workshops and in-service meetings for facilitators and teachers of career education.
4. Collect and organize curriculum and program materials for state-wide usage.
5. Write and publish newsletters to communicate career education news to the field.
6. Determine the best methods of integrating career education into the schools' curricula.

7. Determine the best education materials and activities for each level according to unified school district, community college, area vocational-technical schools, educational service center, and vocational planning center.

There were two performance objectives in addition to the seven product outcomes.

1. Determine the level of understanding of career education among the different groups of teachers, student-teachers, students, and parents.
2. Determine the effectiveness of using successful career education practitioners from the field in providing prospective teachers with an understanding of career education concepts as related to teaching responsibilities.

The evaluation design for these objectives was a pretest of teachers, student teachers, students, and parents before the implementation project activities and then a posttest after completion of the year's activities. A random-sample, classroom cluster design was developed, using the non-parametric techniques of chi square and Mann-Whitney U to determine significant differences in the control group and experimental group.

The population chosen for the administration of the instrument was from five Kansas regions which serve as the organizational bases for the administration of career education programs: Region I, Colby; Region II, Beloit; Region III, Wichita; Region IV, Erie; and Region V, Kansas City.

Location	Population	Total No.	Control Group	Pre Experimental Group	Total No.	Post Control Group	Experimental
All five regions	Teachers	133	65	68	131	64	67
Pittsburg, Hays	Student-Teachers	205	84	121	290	120	170
All five regions	Students K-3 grades	387	157	230	381	156	225*
All five regions	Students 4-6 grades	981	500	481	993	512	481
All five regions	Students 7-12 grades	1474	764	710	1463	753	710
Colby	Parents	269	---	---	---	---	---
	TOTAL	3449			3258		

* These were the numbers entered for K-3, but because of a data error, 112 were not processed.

EVALUATION RESULTS

All of the process objectives were met. A guide for planning and implementing career education was developed and disseminated both within and out of state. The response to the guide was very favorable. A total of twenty workshops and in-service meetings were held across the state to familiarize teachers and facilitators with the latest materials in career education, planning procedures, and classroom demonstrations. Additional career education information was disseminated in three installments of Comment, a career education newsletter which included up to sixteen pages of news items. Thus, process objectives 2, 3, and 4 were met.

Process objective 4 was to collect and organize curriculum and program materials. A search file which includes an occupational library, testing materials, career guidance resources, curriculum guides, and directories was established for across-the-state usage. Process objective 7 was to determine the best materials for each level of the curriculum and type of institution - area vocational-technical school, community college, etc. The materials in the collection were prioritized and marked according to their utility.

To fulfill process objective 1, data were collected in the pre and posttest phases of the assessment. The Olympus Career Education Needs instrument which consists of three levels of test -- for students, grades 4-6; for students, grades 7-12; for teaching and administrators -- was administered in all regions. The Evaluation Research Associates' Non Verbal Career Education Test was given to kindergarten through third grade students in all regions, whereas the Jarmer Questionnaire was administered in only one region -- Colby.

Analysis of data is presented according to the test and grade level. The kindergarten through third grade students' scores indicate no significant difference between the experimental and control groups with a Z score of -0.146 of the Mann-Whitney U score of 8387.021. Level .05 was used as the significant U level. It should be noted that 119 tests were thrown out because -- a). the test was not completed, or b). both the pre and posttest were not taken. At first there was concern over such a high mobility of students in the five regions, but later it was disclosed that Region 3 had not allowed some of those who had taken the pretest to participate in the posttest phase for disciplinary reasons, thus explaining the high number of tests that were eliminated in the program.

The scores on the Career Education Needs for Students, Grades 4-6 indicate no significant difference between the experimental and control groups on the first half of the test -- Occupational awareness. (The Z score of -0.865 of the Mann-Whitney U score of 88461.265). The second part of the test was a format of A). "agree," B.) "disagree," or C). "don't know." If the student's answer shifted to B, it was considered a positive response. In other words a positive response was A to B (agree to disagree) or C to B (don't know to disagree). The proportion of the control group who had positive changes was significantly greater from pretest to posttest than the experimental group. The chi square for the entire test was 105.463 with one degree of freedom.

The Z score of 0.244 for the Mann-Whitney U score of 168804 on the Career Education Needs for Students, Grades 7-12 indicates no significant difference in the two groups of students. Like the test for students in fourth through sixth grades, the second part of the test has a format of A). "agree," B). "disagree," or C). "don't know." If the student's answer shifted to A, it was considered a positive response. The number of positive

and negative changes were approximately equal for the control group. It is necessary to note that some students in the control groups had access to the informative career education activities before the pretest was given in their region.

The Career Education Needs Assessment of Teachers and Administrators was given to 133 teachers. The scores on three portions of the test -- 1). Concepts of Career Education, 2). Resources of the Community, and 3). Role of the School -- indicate no significant difference between the experimental and control groups. The scores on the Role of the Community and the Responsibilities of the School portions had a chi square of 10,876 with a degree of freedom and a chi square of 8.363 with one degree of freedom respectively; thus, these two portions of the test are significant in difference in favor of the experimental groups, implying a change in teacher attitude due to the activities.

The Jarmer Questionnaire was given only in Region I, Colby. The respondent grouping was apportioned to 140 mothers and 129 fathers. Although there are no statistical data for the questionnaire, valuable information and direction about parental attitute were obtained from the test.

The following tables summarize the data analysis. All of the data are on file in the Career Education Office of the State Department of Education.

TABLE I

Test	CONTROL GROUP Pre No.	Mdn.	Post No.	Mdn.	Mdn. Gain	EXPERIMENTAL GROUP Pre No.	Mdn.	Post No.	Mdn.	Mdn. Gain	Mann-Whitney U	Z-Score
ıreer Know. K-3 Items 1-1Ø	1Ø4	6.53	1Ø4	7.Ø8	Ø.43	163	6.27	163	6.97	Ø.63	8387.Ø21	-Ø.146
Items 11-2Ø	1Ø4	6.38	1Ø4	6.86	Ø.21	163	6.19	163	6.86	Ø.39	8Ø42.532	-Ø.714
Items 21-3Ø	1Ø4	8.59	1Ø4	8.87	Ø.26	163	8.56	163	8.78	Ø.42	7963.Ø2Ø	-Ø.856
·ades 4-6 :c. Award	422	9.16	422	1Ø.Ø2	Ø.68	434	9.54	434	1Ø.6Ø	Ø.89	88461.265	-Ø.865
·ades 7-12 :c. Explor.	592	1Ø.78	592	11.19	Ø.38	575	1Ø.79	575	11.14	Ø.34	168Ø4.Ø31	-Ø.244

H-7

TABLE 2

Test and Portions of Test	Control Group: Number of Positive Changes	Control Group: Number of Negative Changes	Experimental Group: Number of Positive Changes	Experimental Group: Number of Negative Changes	Chi Square
Students Grades 4-6 Attitudes and Self Awareness	1417	1100	980	1379	105.463
Students Grades 7-12 Attitudes	2439	2454	2212	2263	0.165
Teachers and Administrators Concept of Career Education	12	7	7	11	2.179
Resources of Community	38	60	42	46	1.515
Role of Community	164	206	219	170	10.876
Role of School	75	74	80	75	0.049
Responsibilities of School	105	174	177	144	18.363
Student Teachers Concept of Career Education	26	18	30	40	2.848
Resources of Community	101	106	135	135	0.049
Role of Community	387	432	566	516	4.769
Role of School	184	165	216	245	2.735
Responsibilities of School	263	357	439	377	18.258

The two performance objectives were evaluated. The assessment provided data which enables career education leaders to determine the level of understanding among the different groups of teachers, student teachers, students, and parents and the effectiveness of innovative programs in preparing student teachers in career education.

From the assessment statistical data were obtained about each representative group. Additionally, in the assessment, comparison was made of the two schools in Region 7, Hays, -- control group -- where the regular methods class was used for student teachers and Region 9, Pittsburg, -- experimental group -- where outstanding practitioners in career education were used to assist student teachers in their development of instructional skills. Only scores on two portions of the Career Education Needs Assessment of Teachers and Administrators given to student-teachers indicate significant difference between the control and experimental groups: (3) Role of the Community and (5) Responsibilities of the School. The following table summarizes the data analysis on this objective.

Table 3
Student Teachers

TEST AND PORTION OF TEST	(Region 7) CONTROL GROUP Number of Positive Changes	Number of Negative Changes	(Region 9) EXPERIMENTAL GROUP Number of Positive Changes	Number of Negative Changes	Chi Square
Concept of Career Ed.	30	25	23	36	2.620
Resources of Community	91	130	111	146	0.173
*Role of the Community	404	440	558	499	4.349
Role of the School	203	171	210	226	2.932
*Responsibility of School	269	384	412	371	17.359

* Significant difference at the .05 level

The two portions of the test -- Role of the Community and Responsibilities of the School — which indicate a significant difference between the experimental and control groups were in favor of Region 9, the experimental group who used the innovative supervised program of successful practitioners of career education with the student teachers.

Generalizations from the assessment of the sample of the total population of Kansas cannot be made, but observations about the raw data collected in the assessment can be stated in the areas of teachers of career education, direction in curriculum, student knowledge of occupations, and student opinion of career education.

A review of the data by Career Education personnel in the State Department of Education reveals the following observations about the teachers.

1. The majority of teachers feel that schools will need additional funding to continue career education.
2. The majority of teachers feel that choosing appropriate goals is not a natural outgrowth of the present school system.
3. The majority of teachers feel that business people have the time to make career related presentations to school classes.
4. The majority of teachers feel that the training of youth for occupations is more the responsibility of the public secondary schools than trade and vocational schools.
5. The majority of teachers feel that to effectively teach career education concepts requires a change in the teacher methods of instruction.
6. The majority of teachers feel that career information should be provided for all students regardless of their career goals.

7. The majority of teachers feel that descriptive occupational brochures are not the best means of providing students with information for making career choices.
8. The majority of teachers feel that they are not aware of career resources in their community.
9. The majority of teachers feel that schools do not contribute in helping students gain an appreciation of the value and importance of work.
10. The majority of teachers feel that "hands-on" work experiences are essential for effective career exploration.

A review of the data by Career Education personnel in the State Department of Education reveals the following observations about the student teachers.

1. The majority of student teachers feel that career information should be provided to all students regardless of their career goals.
2. The majority of student teachers feel that classroom instruction is a valuable vehicle for helping students gain an appreciation of the value and importance of work.
3. The majority of student teachers feel that "hands-on" work experience is essential for effective career exploration.
4. The majority of student teachers have had work experiences.
5. The majority of student teachers feel that career education is a continuous learning process and is pertinent to the four life roles of the family, citizenship, leisure time, and work.

A review of the data by Career Education personnel in the State Department of Education reveals the following observations about students in the seventh through twelfth grades.

1. The majority of students feel the first goal is to complete high school and find work.
2. The majority of students feel that school provides ample occupational information for career planning.
3. The majority of students feel that job placement is not the responsibility of the schools.
4. The majority of students feel that career education could be emphasized within the schools with little change in methods of instruction used by teachers.
5. The majority of students feel that schools are instrumental in helping them decide upon careers.
6. The majority of students feel that success in a career depends on the attitude a person might have toward work in that career.
7. The majority of students feel that it is difficult to learn an occupation without having actual work experience in that occupation.

A review of the data by Career Education personnel in the State Department of Education reveals the following observations about students in the fourth through sixth grades.

1. The majority of students feel that parents do not decide what occupations their children will have.
2. The majority of students feel that every kind of work is important.
3. The majority of students feel that subjects studied in school will help them get a job.

4. Students feel that the two most important factors in deciding on an occupation are a). amount of money made and b). positive work attitudes.
5. The two most important factors in applying for a job are a). education and b). job experience.
6. The majority of students feel that the best way to learn about different occupations is to visit employers.
7. The majority of students feel the most important factor in determining whether one goes to college or not is determined by occupational interest.

The major criticism of the test given to students in the kindergarten through third grades -- The Evaluative Research Associates Non Verbal Career Education Test — that arose in the pretest phase of the assessment occurred in the posttest phase as well. The common complaint was the difficulty of the items for primary students. Some teachers felt the instrument was closer in nature to an intelligence test than to a knowledge of occupations. As a result, the information obtained needs to be gleaned very carefully; and in some areas additional research will be required for this age level of student.

Summary

All of the process objectives for this project were met. As noted before in this report, process objective 2 — develop a guide -- had an impact not only on career education in Kansas but in the rest of the United States as well. Favorable response letters claim that few states have access to guides of planning procedures applied to career education. Thus, the process objective answered a national need as well as a state.

The search file obtained from process objective 4 is housed in the Career Education Office of the State Department of Education. Representatives from the field utilize occupational library, curriculum guides, and testing materials, when they are available. The development of the search file should be expanded into a library room to meet the requests of those using the materials.

Process objective 1 -- needs assessment of career education -- was accomplished, enabling the two performance objectives to be met. The value of the data obtained from the needs assessment in relation to the level of understanding of the different groups will not be fully realized until item by item, region by region analyses can be made in the future. Such analyses and additional instrumentation would unfold information to help in determining an articulated career education program in Kansas.

From the data obtained to meet the objectives, the project can document the change in only teachers within the duration of the project. Such statement raises the questions: Was the project's time period too short to measure significant change in the students as a result of the change in the teachers? Was teacher energy in this change directed toward learning about career education rather than teaching career education?

FINAL AUDIT REPORT

1975-76

AN EXEMPLARY PROJECT TO DEMONSTRATE TRANSPORTING CARFER EDUCATION TECHNIQUES IN KANSAS AND TO PROVIDE A CAREER EDUCATION PRE-SERVICE COMPONENT TO A TEACHER EDUCATION PROGRAM

Kansas State Department of Education

Topeka, Kansas

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July 19, 1976

INTRODUCTION

As indicated in the Critique Audit Report for this project, the educational program audit is an external, independent review of a project to assess the appropriateness of the evaluatuion plan for determining the effectiveness of the project, and to verify the results of the evaluation. The major purpose of the educational program audit is to provide an independent opinion regarding the evaluation of a project, and to make suggestions as to how the evaluation might be improved. Auditing procedures will be based upon those prescribed in the Educational Program Audit Handbooks prepared by Stenner and Webster, and by Morin, which are the two documents usually accepted as basic auditing procedures.

For the Kansas State Department of Education Career Education Project, the auditor noted in the Critique Audit Report that the basic evaluation plan for the project was satisfactory. However, several details regarding the evaluation of each objective were not delineated and should be specified. The auditor suggested that an evaluation outline be delineated so that it would be clear exactly what analyses would be done, when data would be collected, and what analyses would be used with what data.

For this Final Audit Report, the auditor will review the evaluator's Evaluation Report for the project dated July 16, 1976. The purpose of this report is to verify the findings of the evaluation for the project. This report will be reviewed in terms of the Evaluation Plan as well as the objectives delineated for the project.

FINAL AUDIT REPORT

The format of the Final Audit Report will follow that of the Evaluation Report so that easy cross referencing will be possible.

On page 1 of the Evaluation Report, the evaluator lists the two major objectives of the career education project. The first was to determine the effectiveness of using successful career education practitioners from the field in providing prospective teachers with an understanding of career education concepts. This appears to have been accomplished by the evaluation. The second objective was "to demonstrate and compare the effectiveness of delivering career education activities through the use of five different organizational bases". The five different organizational bases are listed on page 2. However, no statistical comparison of the effectiveness of these five bases were done. On page 8 of the Critique Audit Report, the auditor indicated that this appeared to be the purpose of this objective. However, the auditor pointed out that neither the sampling for each base was delineated, nor was the analyses of data specified. With five groups, the auditor suggested that the analyses of covariance be used. It appears that this comparison was not made from a review of the Final Evaluation Report. Also, it appears that all five regions were combined for the analyses from the table on page 2. Thus, the Final Evaluation Report does not present information pertinent to the comparison of the effectiveness of the five different organizational bases.

On page 1 are listed seven product outcomes of the project. In terms of objectives, these really are process objectives, since they delineate a process of doing something.

On page 2 of the Final Evaluation Report, two behavioral objectives are listed. The first is to determine the level of understanding of career education among the different groups of teachers, students, and parents. The evaluator has presented some measures of central tendencies such as the medians in Table 1 on page 6 to indicate level of performance for the students. However, all of the other tables present information about the number of changes for the two groups, control and experimental, but no information about level of performance. The auditor suggests that such information be presented so that it will be known the level of performance on the instruments used. Since the evaluator has treated the data as ordinal data, the auditor suggests presenting the medians for the various groups to delineate level of performance. Although the evaluator did present information comparing the effectiveness of using career education practitioners compared to regular methods, level of performance information would also have been helpful to determine how effective each method was rather than just the comparative data. Thus, the auditor suggests that medians be reported for these two basic groups on each of the tests used.

As mentioned before, the second objective listed on page 1 was to compare the effectiveness of five different organizational bases. However, on the bottom of page 2 the data from the five regions (defined as the organizational bases) were combined. Thus, no data is presented to make the comparisons necessary to compare the five different organizational bases.

The auditor questions the indication on top of page 4 that "119 tests were thrown out" for the K-3 level. The table on page 2 indicates that there was only a decrease of 6 students from pre-test to post-test for both the control and experimental groups. Thus, it is not clear what numbers of students were used in the final analyses. Do the figures in the table on page 2 indicate

the total number of subjects available, or do they indicate the total number of subjects used in the data analyses? The size of the samples listed on the table on page 2 and the size listed in Table 1 on page 6 do not represent a difference of 119. Thus, it is not clear what the numbers in the table on page 2 indicate.

On page 4 of the Evaluation Report, the evaluator used the Mann-Whitney U test to compare the experimental and the control groups. The auditor checked the computations of these analyses by re-computing the U and Z results, and by running the Median Test on the same data. The auditor verifies that the computations are accurate. However, it is not clear from either the Evaluation Report or the computer output exactly what data was used for these analyses. Was the gain score for each part of the test used, and was this used for each student? The auditor suggests that the data used for these analyses be delineated completely so that the reader knows exactly what data was used. This would make these analyses more meaningful to the reader.

On page 4, the evaluator indicated that he used a chi square analyses for the second part of the Career Education Needs test. The evaluator also used the chi square analyses for other groups and for other tests as reported in Tables 2 and 3 on pages 7 and 8 of the Evaluation Report. However, it appears that only the chi square values for the "Concept of Career Education" is valid. The other chi squares were computed on data which was combined for individuals. As pointed out by Siegel, "N is the sum of each group of marginal totals. It represents the total number of independent observations. Inflated N's invalidate the test." (S. Siegel, Nonparametric Statistics. McGraw-Hill, New York, 1956, p. 109.) McNemar points out that one of the basic assumptions for using chi square is that the observations be independent of one another.

"This assumption is violated when the total of the observed frequencies exceeds the total number of persons in the sample(s). Such an inflation of N occurs when multiple observations are made on each person and each person is counted more than once." (Q. McNemar, Psychological Statistics, Wiley, New York, 1962, pp. 218-219.) From the computer output, all of the other chi square computations were done with data which was obtained from multiple observations, which in the present cases are items on the different instruments. Thus, all of the chi square values reported except the three based upon single items are suspect. The auditor recomputed the three chi squares for Item 1-A dealing with Concept of Career Education, and found these to be correct. The auditor suggests that the chi square values be recomputed for each item separately so that the assumption of independent observations is not violated. For the Evaluation Report, all conclusions based upon these chi square analyses should be regarded as not valid since the assumption of independent observations was violated.

On page 8, the evaluator lists two behavioral or performance objectives. The first deals with level of understanding, and the second deals with comparing the effectiveness of the two methods of preparing student teachers in career education. As pointed out before in this report, it would have been helpful to provide information regarding level of understanding such as median values for the test used, or mean and standard deviation of test scores. As is, the only data presented is pertinent to the number of positive and negative changes for the two groups. No information is presented regarding level of understanding. As indicated above, the only chi square value which is correct is that for the Concept of Career Education item. The other chi square values are invalid since they were computed on data which violates the basic assumption of independent observations. Thus, it would be very suspect to make any conclusions based upon the other four chi squares presented in the table.

The auditor notes that he questioned the use of chi square in his audit report dated May 10, 1976, on page 7 of that report. The auditor noted that it was not clear what data would be used for which analyses, and the auditor pointed out that the chi square analyses is for independent samples and not valid for dependent groups as presented.

On page 9 of the Evaluation Report, the evaluator makes the statement that generalizations from the evaluation of the sample to the total population of Kansas can not be made. However, it is not clear what is meant by this statement. Also, since the evaluator indicated on page 2 that a random, cluster sample was used and since five regions in Kansas were sampled, it seems that some generalizations might be possible. Thus, the auditor would like the evaluator to expand on his statement, defining the extent to which he believes that the study is generalizable.

On pages 9 through 12 are several statements pertinent to what the data reveals. However, the source of this data is not given and it is not clear as to what data supports these observations. The evaluator should present at least the source of the data to support these observations. Also, if the evaluator could be more specific rather than just indicating "the majority of teachers . . ." Does this mean 51% or 90% of the teachers? The auditor feels that more information pertinent to these statements would be more meaningful to the reader. Likewise for the information presented about student teachers and students.

On page 12, the auditor questions the evaluator's statement that the two behavioral objectives were met just because the first product or process objective was met. This permitted the presentation of this data and the data for testing the difference between the control and the experimental groups,

but did not in itself cause these two objectives to be met. As indicated in this report, level of understanding data was not presented in this report for student teachers, and the chi square values to compare the effectiveness appear to be invalid.

FINAL AUDIT SUMMARY

In this Final Audit Report, the auditor noted several aspects of the evaluation which are questionable. These will be itemized below.

1. Only partial information was presented in the Evaluation Report pertinent to the two major objectives of the Career Education Project. The first objective was to determine the effectiveness of training teachers and this was accomplished in a comparative analyses. The second was to demonstrate and compare the effectiveness of five different organizational bases for delivering career education activities. Since all five bases were combined, it appears that no attempt was made to demonstrate or compare the effectiveness of the five different bases. Thus, this aspect of the project appears to not have been done.

2. One of the behavioral objectives was to determine "level of understanding" of career education among the various groups. Little information pertinent to "level of understanding" was presented in the Evaluation Report. The author suggests that such information be provided so that this information is communicated in the report.

3. There is a lack of information pertinent to the number of subjects used compared to the number included in the various samples. More information concerning the proportion of the samples used in the various analyses would be helpful.

4. More information about the data used in the analyses would have been helpful, especially for the data used for the Mann-Whitney analyses. It is not clear in the report exactly how the scores or the data for the analyses were obtained. Such information would be helpful in interpreting the results of these analyses.

5. Only three of the chi square analyses are valid. All of the other chi squares were computed with data which violates the assumption of independent observations for this statistic. Thus, the chi square analyses based upon data summed over a number of observations for each individual so that the total N used is larger than the number of individuals are not valid. The auditor suggests re-computing the chi square analyses by item so that this assumption is not violated.

6. It would be helpful if the evaluator would have elaborated on his statement regarding generalizations possible from this study. It appears to the auditor that some generalizations would be possible since a random sample was used.

7. There should be a data source for the observations made on pages 9 to 12 in the Evaluation Report to document these statements. Also, more specific information regarding these observations might be helpful.

The auditor verifies that the analyses which were legitimately applied are correct since he re-computed these analyses and found them to be accurate. Except for the seven points outlined above, the evaluation for the Career Education Project appears to be valid. As indicated above, more information pertinent to the evaluation could have been provided so that a more thorough evaluation of the effectiveness of the project could have been communicated.

RESPONSE TO FINAL AUDIT REPORT
OF THE FINAL EVALUATION

To provide additional information concerning questions raised in the final audit report, an addendum has been included in the report.

A. "The auditor suggests that medians be reported in these two basic groups on each of the tests used." p. 3.

The Career Knowledge test is designed to assess the knowledge and concepts of primary level children of the world of work. The CK is a nonverbal test in which a key word is pronounced to the student, and he/she selects the picture that exemplified the word. The CK consists of three parts:

1. Occupational similarities (10 questions) assesses the ability of students to match occupations according to which ones are most alike.

2. Occupational differences (10 questions) measures the ability of students to select which occupations are least alike.

3. Occupational tools (10 questions) measures the ability of students to identify the tools used in selected occupations.

The median scores for the three parts of the career knowledge test are shown in the following table.

CAREER KNOWLEDGE

Subtest: Similarities

	Control	Experimental
Pretest	6.52	6.27
Posttest	7.08	6.97
Gain	0.43	0.60

Subtest: Differences

	Control	Experimental
Pretest	6.38	6.19
Posttest	6.86	6.86
Gain	0.21	0.39

Subtest: Tools

	Control	Experimental
Pretest	8.59	8.56
Posttest	8.87	8.78
Gain	0.26	0.42

The Olympus Career Education Assessment for students in grades four through six is designed to measure student needs in the areas of occupational awareness, self-awareness, attitudes, and career development. The assessment test is divided into the following three parts:

1. Part one provides information about student occupational awareness levels.
2. Part two provides information about students' attitudes toward careers.
3. Part three provides information about the students own career development.

The median scores for part one of the needs assessment are shown in Table 2.

Table 2

CAREER EDUCATION ASSESSMENT (4-6)

Occupational Awareness

	Control	Experimental
Pretest	9.16	9.54

Table 2

CAREER EDUCATION ASSESSMENT (4-6)

Occupational Awareness

	Control	Experimental
Posttest	10.02	10.60
Gain	0.68	0.89

The Olympus Career Education Assessment for Students in grades seven through twelve is designed to assess student awareness and needs in the areas of occupational exploration and development. The assessment test is divided into the following two parts:

1. Part one provides information for strengthening career areas in the curriculum and inventories students' work experiences.

2. Part two provides information about values and the relationship of values to career choices.

The median scores for parts one and two as combined in the data analyses of the needs assessment are shown in Table 3.

CAREER EDUCATION ASSESSMENT (7-12)

Occupational Awareness

	Control	Experimental
Pretest	10.78	10.79
Posttest	11.19	11.14
Gain	0.38	0.34

Table 3

B. "No data is presented to make the comparisons necessary to compare the five different organizational bases." p. 3.

The evaluation report on page 12 indicated that the duration of the project was completed before "item by item, region by region" analyses could be done. Further analyses of the data is anticipated.

C. "It is not clear what the numbers in the table on page 2 indicate."

A footnote has been added to explain the discrepancy in the number of subjects and the number of tests which were thrown out.

D. "The data used for these analyses be delineated completely so that the reader knows exactly what data was used." p. 4.

The raw data is included in the appendices of the report. The auditor did not have access to the entire report when he audited the evaluation portion.

E. "All conclusions based upon these chi square analyses should be regarded as not valid since the assumption of independent observations was violated." p. 5.

In the audit made following the pretest phase of the assessment, the auditor objected to the Mann-Whitney U and chi square analyses being used to analyze the data. The auditor at that time recommended a parametric statistic such as the Fisher's *t* or the analyses of variance. The evaluator of the project preferred to continue with the Mann-Whitney U in the data analyses. Since both the auditor and evaluator are statisticians, the disagreement over the method of analyses is at a standstill until a third statistician is consulted.

DISSEMINATION

Dissemination activities of the project materials were based on two parameters: 1). fostering communications and 2). sharing of materials among the career education programs throughout the state.

1. In order for the career education teachers and facilitators to choose appropriate instructional materials, the director of the project collected, evaluated, catalogued, and housed in the State Department of Education career education information which had been prepared by teachers, commercial publishers, and business, and industry. Much of the material was reproduced and disseminated at the twenty workshops held across the state. The following list enumerates the requests for and presentation of materials:
   A. Fifty-two requests for materials filled
   B. Workshops -- twenty across the state. A total of 500 participants.
   C. Thirty-five people visiting to utilize materials in-house
   D. One parent group of over 300 participants.
2. In order to share achievements and progress of the state in career education, the federal director disseminated the Guide for Implementing Career Education in Kansas Schools to the Chief School Officers and the Curriculum Director of departments and U. S. Office of Education. In the state, the guide was distributed and discussed at the twenty workshops.

The following list enumerates where the guide was presented and disseminated:

A. Phoenix, Arizona -- Coordinator's Meeting

B. Washington, D. C. -- Director's Meeting

C. Vail, Colorado -- Leadership Meeting

D. Pittsburg, Kansas -- Six Community Junior College Presidents and thirty-two superintendents

E. All of Kansas school districts - 308

F. Emporia, Kansas -- text in college career class - twenty-five students

G. Kansas State Department of Education personnel

H. State Education Committee of Kansas Legislature -- thirty-two -- and Governor of State.

3. In order to communicate the latest information about career education, the director of the project disseminated Comment, a career education newsletter, to all school districts, community colleges, colleges, and area vocational-technical schools in the state and all of the State School Officers.

4. In order to share career education material obtained from the two national meetings -- Houston, Texas, and Vail, Colorado -- the director of the federal project reproduced and mailed copies of all handouts received in the national meeting to the five facilitators of the state.

5. In order to publicize the career education movement, the federal director published the following articles:

   A. Two articles on career education in Kansas in the Associated Press

   B. All five facilitators averaged one article per week on the progress of career education in the local newspapers (See appendices.)

Career Education Needs Assessment - Test 1 - Region - All

Group #1

	CONTROL GROUP				TEST GROUP			
	Pre N	Post N	Pre %	Post %	Pre %	Post %	Pre %	Post %
1. Career education is a continuous learning process that will assist all individuals in decision making through integrated school and community activities. These decisions will be implemented through the process of career awareness, exploration, and preparation, and will be pertinent to the four life roles of the family, citizenship, leisure time, and work.								
A. Strongly Agree	23	28	35.4	43.8	41	42	60.3	62.7
B. Agree	41	29	63.1	45.3	27	17	39.7	40.3
C. Disagree	1	2	1.5	3.7	0	0	0	0
D. Strongly Disagree	0	0	0	0	0	1	0	1.5
E. No Response	0	5	0	7.8	0	7	0	10.5
2. A majority of communities cannot provide opportunities for students to have work experience.								
A. Strongly Agree	8	4	12.3	6.3	7	2	10.3	3.0
B. Agree	23	30	35.4	46.9	26	15	38.2	22.4
C. Disagree	26	17	40.0	26.6	22	28	32.4	41.8
D. Strongly Disagree	8	8	12.3	12.5	13	15	19.1	22.4
E. No Response	0	5	0	7.8	0	7	0	10.4
3. Instruction should be established on the basis of student career interests.								
A. Strongly Agree	12	6	18.5	9.4	14	12	20.6	17.9
B. Agree	39	38	60.0	59.4	39	34	57.4	50.7
C. Disagree	14	16	21.5	25.0	11	12	16.8	17.9
D. Strongly Disagree	0	0	0	0	4	2	5.9	3.0
E. No Response	0	4	0	6.3	0	7	0	10.5

M-1

	CONTROL GROUP				TEST GROUP			
	Pre N	Post N	Pre %	Post %	Pre N	Post N	Pre %	Post %
4. People in the community lack the knowledge and teaching experience necessary to make a meaningful contribution to classes.								
A. Strongly Agree	2	0	3.1	0	2	4	2.9	6.0
B. Agree	2	3	3.1	4.7	5	3	7.4	4.5
C. Disagree	27	34	41.5	53.1	33	23	48.5	34.3
D. Strongly Disagree	34	23	52.3	35.9	28	29	41.2	43.3
E. No Response	0	4	0	6.3	0	8	0	12.0
5. The need for students to spend time away from school during the day to secure work experience results in more problems than benefits.								
A. Strongly Agree	0	2	10.8	3.1	3	1	4.4	1.5
B. Agree	7	12	18.5	18.8	6	9	8.8	13.4
C. Disagree	41	39	63.1	60.9	37	31	54.4	46.3
D. Strongly Disagree	16	7	24.6	10.9	21	18	30.9	26.9
E. No Response	1	4	1.5	6.3	1	8	1.5	12.0
6. Students would benefit if they could gain more information on vocational programs.								
A. Strongly Agree	25	15	39.5	23.4	22	16	32.4	23.9
B. Agree	40	44	61.5	68.8	42	42	61.8	62.7
C. Disagree	0	1	0	1.6	3	2	4.4	3.0
D. Strongly Disagree	0	0	0	0	0	0	0	0
E. No Response	0	4	0	6.3	0	7	0	10.4
7. Since large numbers of students are going to college, college preparatory subjects should be stressed more heavily in school.								
A. Strongly Agree	4	1	6.2	1.6	6	2	8.8	3.0
B. Agree	15	19	23.1	29.7	13	14	19.1	20.9
C. Disagree	37	35	56.9	54.7	35	30	51.5	44.8
D. Strongly Disagree	9	5	13.8	7.8	13	14	19.1	20.9
E. No Response	0	4	0	6.3	1	7	1.5	10.4

	CONTROL GROUP				TEST GROUP			
	Pre N	Post N	Pre %	Post %	Pre N	Post N	Pre %	Post %
8. Students do not become interested in occupations until the high school years.								
A. Strongly Agree	1	0	1.5	0	3	1	4.4	1.5
B. Agree	9	10	13.8	15.6	7	6	10.3	9.0
C. Disagree	35	35	53.8	54.7	31	28	45.6	41.8
D. Strongly Disagree	20	15	30.8	23.4	27	25	39.7	37.3
E. No Response	0	4	0	6.3	0	7	0	10.4
9. Schools provide students with ample occupational information for career planning.								
A. Strongly Agree	0	0	0	0	1	1	1.5	1.5
B. Agree	5	10	7.7	15.6	5	4	7.4	6.0
C. Disagree	39	43	60.0	67.2	37	39	54.4	58.2
D. Strongly Disagree	21	7	32.3	10.9	24	15	35.3	23.9
E. No Response	0	4	0	6.3	1	7	1.5	10.4
10. Preparation for careers is more easily accommodated with large group instruction.								
A. Strongly Agree	0	0	0	0	2	1	2.9	1.5
B. Agree	1	8	1.5	12.5	4	3	5.9	4.5
C. Disagree	51	43	78.5	67.2	44	42	64.7	62.7
D. Strongly Disagree	13	9	20.0	14.1	18	13	26.5	19.4
E. No Response	0	4	0	6.3	0	8	0	11.9
11. Career placement is a responsibility of the school for all students.								
A. Strongly Agree	0	0	0	0	7	6	10.3	9.0
B. Agree	19	17	29.2	26.6	17	18	25.0	26.9
C. Disagree	36	36	55.4	56.3	39	33	57.4	49.3
D. Strongly Disagree	8	7	12.3	10.9	5	3	7.4	4.5
E. No Response	2	4	3.1	6.3	0	7	0	10.4

	CONTROL GROUP				TEST GROUP			
	Pre N	Post N	Pre %	Post %	Pre N	Post N	Pre %	Post %
12. Students should select an occupation in the elementary grades and pursue it through their school years.								
A. Strongly Agree	0	0	0	0	2	2	2.9	3.0
B. Agree	4	4	6.2	6.3	4	5	5.9	7.5
C. Disagree	34	32	52.3	50.0	34	35	50.0	52.2
D. Strongly Disagree	27	24	41.5	37.5	28	18	41.2	26.9
E. No Response	0	4	0	6.3	0	7	0	10.4
13. Schools will need additional funding to continue career education.								
A. Strongly Agree	17	13	26.2	20.3	20	16	29.4	23.9
B. Agree	34	35	52.3	54.7	40	27	58.8	40.3
C. Disagree	10	9	15.4	14.1	6	16	8.8	23.9
D. Strongly Disagree	1	2	1.5	3.1	1	0	1.5	0
E. No Response	3	5	4.6	7.8	1	3	1.5	4.5
14. Choosing appropriate career goals is a natural outgrowth of the present school program.								
A. Strongly Agree	1	0	1.5	0	2	3	2.9	4.5
B. Agree	16	17	24.6	26.6	20	15	29.4	22.4
C. Disagree	44	40	67.7	62.5	30	32	44.1	47.8
D. Strongly Disagree	4	3	6.2	4.7	15	10	22.1	14.9
E. No Response	0	4	0	6.3	1	7	1.5	10.4
15. The school is best suited to education; therefore, the community should not be involved in helping students prepare for occupations.								
A. Strongly Agree	0	0	0	0	0	1	0	1.5
B. Agree	2	1	3.1	1.6	1	1	1.5	1.5
C. Disagree	30	35	46.2	54.7	29	25	42.6	37.3
D. Strongly Disagree	33	24	50.8	37.5	38	33	55.9	49.3
E. No Response	0	4	0	6.3	0	7	0	10.4

	CONTROL GROUP				TEST GROUP			
	Pre N	Post N	Pre %	Post %	Pre N	Post N	Pre %	Post %
16. Business people have neither the time nor the inclination to make career-related presentations to school classes.								
A. Strongly Agree	1	1	1.5	1.6	0	0	0	0
B. Agree	1	1	1.5	1.6	2	5	2.9	7.5
C. Disagree	34	40	52.3	62.5	35	28	51.5	41.8
D. Strongly Disagree	29	18	44.6	28.1	31	27	45.6	40.3
E. No Response	0	4	0	6.3	0	7	0	10.4
17. The training of youth for occupations is more the responsibility of trade and vocational schools than public secondary schools.								
A. Strongly Agree	1	0	1.5	0	1	1	1.5	1.5
B. Agree	10	24	15.4	37.5	7	11	10.3	16.4
C. Disagree	35	33	53.8	51.6	36	32	52.9	47.8
D. Strongly Disagree	19	3	29.2	4.7	24	16	35.3	23.9
E. No Response	0	4	0	6.3	0	7	0	10.4
18. To effectively teach career education concepts will require changes in teachers' methods of instruction.								
A. Strongly Agree	5	3	7.7	4.7	5	8	7.4	11.9
B. Agree	43	36	66.2	56.3	37	35	54.4	52.2
C. Disagree	13	19	20.0	29.7	23	16	33.8	23.9
D. Strongly Disagree	2	0	3.1	0	2	1	3.1	1.5
E. No Response	2	6	3.1	9.4	1	7	1.5	10.4
19. Career information should be provided to all students, regardless of their career goals.								
A. Strongly Agree	27	15	41.5	23.4	27	28	39.7	41.8
B. Agree	38	44	58.5	68.8	37	30	54.4	44.8
C. Disagree	0	1	0	1.6	3	2	4.4	3.0
D. Strongly Disagree	0	0	0	0	1	0	1.5	0
E. No Response	0	4	0	6.3	0	7	0	10.4

M-5

	CONTROL GROUP				TEST GROUP			
	Pre N	Post N	Pre %	Post %	Pre N	Post N	Pre %	Post %
20. Teachers do not have enough time to integrate careers into what they teach.								
A. Strongly Agree	0	1	0	1.6	3	2	4.4	3.0
B. Agree	11	18	16.9	28.1	8	5	11.8	7.5
C. Disagree	45	37	69.2	57.1	37	36	54.4	53.7
D. Strongly Disagree	9	3	13.8	4.7	19	17	27.9	25.4
E. No Response	0	5	0	7.8	1	7	1.5	10.4
21. Schools are doing an adequate job of preparing students for the world of work.								
A. Strongly Agree	0	0	0	0	2	1	2.9	1.5
B. Agree	6	10	9.2	15.6	6	7	8.5	10.4
C. Disagree	41	31	63.1	48.4	41	42	60.3	62.7
D. Strongly Disagree	18	17	27.7	26.6	18	10	26.5	14.9
E. No Response	0	6	0	9.4	1	7	1.5	10.4
22. Descriptive occupational brochures are the best means of providing students with information for making career choices.								
A. Strongly Agree	1	0	1.5	0	0	1	0	1.5
B. Agree	3	3	4.6	4.7	3	8	4.4	11.9
C. Disagree	43	44	66.2	68.8	50	43	73.5	64.8
D. Strongly Disagree	18	12	27.7	18.8	15	8	22.1	11.9
E. No Response	0	5	0	7.8	0	7	0	10.4
23. Career development begins in early childhood.								
A. Strongly Agree	13	11	20.0	17.2	17	19	25.0	28.4
B. Agree	39	43	60.0	66.7	44	36	64.7	53.7
C. Disagree	11	5	16.9	7.8	5	5	7.4	7.5
D. Strongly Disagree	1	0	1.5	0	1	0	1.5	0
E. No Response	1	5	1.5	7.8	1	7	1.5	10.4

	CONTROL GROUP				TEST GROUP			
	Pre N	Post N	Pre %	Post %	Pre N	Post N	Pre %	Post %
24. Preparation for life should center on learning academic subjects.								
A. Strongly Agree	1	2	1.5	3.1	2	3	2.9	4.5
B. Agree	18	18	27.7	28.1	15	18	22.1	26.9
C. Disagree	36	39	55.4	60.9	40	32	58.8	47.8
D. Strongly Disagree	9	1	13.8	1.6	11	7	16.2	10.4
E. No Response	1	4	1.5	6.3	0	7	0	10.4
25. The successful implementation of career education is dependent on class size.								
A. Strongly Agree	7	1	10.8	1.6	5	3	7.4	4.5
B. Agree	29	23	44.6	35.9	22	18	32.4	26.7
C. Disagree	27	30	41.5	46.9	35	33	51.5	49.3
D. Strongly Disagree	2	5	3.1	7.8	6	5	8.8	7.5
E. No Response	0	5	0	7.8	0	8	0	11.9
26. Since students have a lifetime to prepare for work, they should spend their school time on academic subjects.								
A. Strongly Agree	1	0	1.5	0	0	1	0	1.5
B. Agree	2	14	3.1	21.9	1	2	1.5	3.0
C. Disagree	48	40	73.8	62.5	51	45	75.0	67.2
D. Strongly Disagree	13	5	20.0	7.8	15	12	22.1	17.9
E. No Response	1	5	1.5	7.8	1	7	1.5	10.4
27. Teachers are aware of career resources in their community.								
A. Strongly Agree	2	1	3.1	1.6	1	2	1.5	3.0
B. Agree	11	15	16.9	23.4	15	9	22.1	13.4
C. Disagree	42	36	64.6	56.3	45	38	66.2	56.7
D. Strongly Disagree	9	8	13.8	12.5	7	11	10.3	16.4
E. No Response	1	4	1.5	6.3	0	7	0	10.4

	CONTROL GROUP				TEST GROUP			
	Pre N	Post N	Pre %	Post %	Pre N	Post N	Pre %	Post %
28. Since automation is rapidly changing the roles in the world of work, students need only a general education.								
A. Strongly Agree	0	0	0	0	1	1	1.5	1.5
B. Agree	2	5	3.1	7.8	4	5	5.9	7.5
C. Disagree	39	46	60.0	71.9	44	37	64.7	55.2
D. Strongly Disagree	24	9	36.9	14.1	19	17	27.9	25.4
E. No Response	0	4	0	6.3	0	7	0	10.4
29. If a person is positive of the career he wants to enter, there is no need to explore other alternatives.								
A. Strongly Agree	0	0	0	0	0	0	0	0
B. Agree	1	3	1.5	4.7	0	3	0	4.5
C. Disagree	40	40	61.5	62.5	39	33	57.4	49.3
D. Strongly Disagree	24	17	36.9	26.6	29	24	42.6	35.8
E. No Response	0	4	0	6.3	0	7	0	10.4
30. Individuals can be happy and successful in life even if they do not like their careers.								
A. Strongly Agree	1	0	1.5	0	0	0	0	0
B. Agree	10	12	15.4	18.8	13	11	19.1	16.4
C. Disagree	29	32	44.6	50.0	32	31	47.1	46.3
D. Strongly Disagree	24	16	36.9	25.0	23	19	33.8	28.4
E. No Response	1	4	1.5	6.3	0	6	0	9.0
31. Schools should stress the dignity of workers in their curriculums, regardless of the tasks those workers perform.								
A. Strongly Agree	28	22	43.1	34.4	40	32	58.8	47.8
B. Agree	35	36	53.8	56.3	26	25	38.2	37.3
C. Disagree	2	1	3.1	1.6	2	4	3.1	6.0
D. Strongly Disagree	0	1	0	1.6	0	0	0	0
E. No Response	0	4	0	6.3	0	6	0	8.9

	CONTROL GROUP				TEST GROUP			
	Pre N	Post N	Pre %	Post %	Pre N	Post N	Pre %	Post %
32. Individuals who are outstanding in academic achievement will be successful in their chosen careers.								
A. Strongly Agree	0	0	0	0	1	2	1.5	3.0
B. Agree	10	8	15.4	12.5	4	8	5.9	11.9
C. Disagree	39	40	60.0	62.5	49	38	72.1	56.7
D. Strongly Disagree	13	12	20.0	18.8	14	13	20.6	19.4
E. No Response	3	4	4.6	6.3	0	6	0	9.0
33. Individuals who are outstanding in extracurricular activities at school will be successful in their chosen careers.								
A. Strongly Agree	0	0	0	0	2	1	3.1	1.5
B. Agree	12	11	18.5	17.2	9	12	13.2	17.9
C. Disagree	43	39	66.2	60.9	46	38	67.6	56.7
D. Strongly Disagree	8	9	12.3	14.1	10	10	14.7	14.9
E. No Response	2	5	3.1	7.8	1	6	1.5	9.0
34. Classroom instruction is a valuable vehicle for helping students gain an appreciation of the value and importance of work.								
A. Strongly Agree	16	10	24.6	15.6	19	14	27.9	20.9
B. Agree	42	43	64.6	67.2	45	42	66.2	62.7
C. Disagree	5	7	7.7	10.9	4	5	5.9	7.5
D. Strongly Disagree	1	0	1.5	0	0	0	0	0
E. No Response	1	4	1.5	6.3	0	6	0	9.0
35. Schools make a positive contribution in helping students gain an appreciation of the value and importance of work.								
A. Strongly Agree	5	8	7.7	12.5	5	5	7.4	7.5
B. Agree	42	39	64.6	60.9	40	34	58.8	50.7
C. Disagree	12	12	18.5	18.8	21	21	30.9	31.3
D. Strongly Disagree	3	0	4.6	0	2	1	2.9	1.5
E. No Response	3	5	4.6	7.8	0	6	0	9.0

	CONTROL GROUP				TEST GROUP			
	Pre N	Post N	Pre %	Post %	Pre N	Post N	Pre %	Post %
36. Today there is little need for retraining once a person becomes established in a career.								
A. Strongly Agree	0	0	0	0	0	0	0	0
B. Agree	1	3	1.5	4.7	0	3	0	4.5
C. Disagree	35	43	53.8	67.2	41	32	60.3	47.8
D. Strongly Disagree	29	14	44.6	21.9	27	26	39.7	38.8
E. No Response	0	4	0	6.3	0	6	0	9.0
37. School programs are instrumental in helping students decide upon careers.								
A. Strongly Agree	2	4	3.1	6.3	3	6	4.4	9.0
B. Agree	36	29	55.4	45.3	41	26	60.3	38.8
C. Disagree	23	27	35.4	42.2	23	26	33.8	38.8
D. Strongly Disagree	4	0	6.2	0	1	2	1.5	3.0
E. No Response	0	4	0	6.3	0	7	0	10.4
38. School programs help students understand how important careers are in making a better society.								
A. Strongly Agree	1	2	1.5	3.1	3	5	4.4	7.5
B. Agree	41	35	63.1	54.7	44	34	64.7	50.7
C. Disagree	21	23	32.3	35.9	18	20	26.5	29.9
D. Strongly Disagree	2	0	3.1	0	2	2	2.9	3.0
E. No Response	0	4	3.1	6.3	1	6	1.5	9.0
39. School programs help instill a desire in students to explore and evaluate various job potentials and future career opportunities.								
A. Strongly Agree	1	2	60.0	3.1	6	5	8.8	7.5
B. Agree	32	27	49.5	42.2	35	32	51.5	47.8
C. Disagree	28	30	43.1	46.9	24	21	35.3	31.3
D. Strongly Disagree	1	0	1.5	0	2	3	2.9	4.5
E. No Response	3	5	4.6	7.8	1	6	1.5	9.0

	CONTROL GROUP				TEST GROUP			
	Pre N	Post N	Pre %	Post %	Pre N	Post N	Pre %	Post %
40. If an individual does not like the work which is part of his or her career, the solution is to change jobs.								
A. Strongly Agree	4	2	6.2	3.1	3	3	4.4	4.5
B. Agree	30	23	46.2	35.9	35	34	51.5	50.7
C. Disagree	28	34	43.1	53.1	26	22	38.2	32.8
D. Strongly Disagree	0	0	0	0	2	2	2 9	3.0
E. No Response	3	5	4.6	7.8	2	6	2.9	9.0
41. Career success is primarily dependent upon attitudes.								
A. Strongly Agree	10	13	15.4	20.3	14	14	20.6	20.9
B. Agree	47	38	72.3	59.4	43	31	63.2	46.3
C. Disagree	8	8	12.3	12.5	10	14	14.7	20.9
D. Strongly Disagree	0	0	0	0	0	1	0	7.5
E. No Response	0	5	0	7.8	1	7	1.5	10.4
42. Every class could be instrumental in helping students make decisions about careers.								
A. Strongly Agree	8	6	12.3	9.4	12	13	17.6	19.4
B. Agree	40	40	61.5	62.5	46	36	67.6	53.7
C. Disagree	17	13	26.2	20.3	7	12	10.3	17.9
D. Strongly Disagree	0	0	0	0	2	0	2.9	0
E. No Response	0	5	0	7.8	1	6	1.5	9.0
43. It is difficult to learn an occupation without having actual work experience in that occupation.								
A. Strongly Agree	15	9	23.1	14.1	14	6	20.6	9.0
B. Agree	41	42	63.1	65.6	42	40	61.7	59.7
C. Disagree	9	7	13.8	10.9	11	13	16.2	19.4
D. Strongly Disagree	0	1	0	1.6	0	2	0	3.0
E. No Response	0	5	0	7.8	1	6	1.5	9.0

	CONTROL GROUP				TEST GROUP			
	Pre N	Post N	Pre %	Post %	Pre N	Post N	Pre %	Post %
44. "Hands-on" work experience is essential for effective career exploration.								
A. Strongly Agree	14	8	21.5	12.5	10	12	14.7	17.9
B. Agree	41	36	63.1	56.3	48	37	70.6	55.2
C. Disagree	9	13	13.8	20.3	10	9	14.7	13.4
D. Strongly Disagree	0	2	0	3.1	0	2	0	3.0
E. No Response	1	5	1.5	7.8	0	7	0	10.4
45. "Hands-on" work experience is essential in order to gain effective career awareness.								
A. Strongly Agree	15	4	23.1	6.8	6	10	8.8	14.9
B. Agree	35	33	53.8	51.6	37	29	54.4	43.3
C. Disagree	14	22	21.5	34.4	25	18	36.8	26.9
D. Strongly Disagree	0	1	0	1.6	0	3	0	4.5
E. No Response	1	4	1.6	6.3	0	7	0	10.4
46. For how many occupations have you actually studied of prepared?								
A. One	24	30	36.9	46.9	20	18	29.4	26.9
B. Two	24	20	36.9	31.3	25	18	36.8	26.9
C. Three	9	6	13.9	9.4	11	10	16.2	14.9
D. Four or More	8	4	12.3	6.3	12	15	17.6	22.4
E. No Response	0	4	0	6.3	0	6	0	9.0
47. In how many occupations have you been employed?								
A. One	15	16	23.1	25.0	13	11	19.1	16.4
B. Two	16	15	24.6	23.4	18	10	26.5	14.9
C. Three	17	18	26.2	28.1	14	15	20.6	22.4
D. Four or More	17	11	26.2	17.1	23	25	33.8	37.3
E. No Response	0	4	0	6.3	0	6	0	9.0

	CONTROL GROUP				TEST GROUP			
	Pre N	Post N	Pre %	Post %	Pre N	Post N	Pre %	Post %
48. For how many of occupations in which you have been employed were you not formally prepared?								
A. None	26	20	40.0	31.3	27	24	39.7	35.8
B. One	17	18	26.2	28.1	23	13	33.8	19.4
C. Two	15	11	23.1	17.1	8	11	11.8	16.4
D. Three or More	9	10	13.9	15.6	10	12	14.7	17.9
E. No Response	1	5	1.5	7.8	0	7	0	10.4
49. Which school personnel are most influential in effective career decision making?								
A. Counselors	21	19	32.3	29.7	14	10	20.6	14.9
B. Teachers	31	31	47.7	48.4	47	43	69.1	64.2
C. Cocurricular Supervisors	1	3	1.5	4.7	3	5	4.4	7.5
D. No One in School	11	7	16.9	10.9	3	3	4.4	4.5
E. No Response	1	4	1.5	6.3	1	6	1.5	9.0
50. During the last school year, how many educational field trips did your class take?								
A. None	24	25	36.9	39.1	14	9	20.6	13.4
B. One to Three	32	31	49.2	48.4	38	36	55.9	53.7
C. Four or Five	3	2	4.6	3.1	6	10	8.8	14.9
D. Six or More	2	2	3.1	3.1	8	6	11.8	9.0
E. No Response	4	4	6.2	6.3	2	6	2,9	9.0
51. During the last school year, how many community resource persons did you coordinate into your classroom instruction?								
A. None	33	34	50.8	53.1	21	10	30.9	14.9
B. One to Three	22	25	33.9	39.1	24	30	35.3	44.8
C. Four to Five	5	1	7.7	1.6	10	8	14.7	11.9
D. Six or More	0	0	0	0	11	13	16.2	4.5
E. No Response	5	4	7.7	6.3	2	6	2.9	9.0

	CONTROL GROUP				TEST GROUP			
	Pre N	Post N	Pre %	Post %	Pre N	Post N	Pre %	Post %
52. To effectively infuse the career education concept with existing courses, it is necessary that the teacher first:								
A. Develop Career Education Materials	4	6	6.2	9.4	4	8	5.9	11.9
B. Be Aware of Various Occupations	18	13	27.7	20.3	8	9	11.8	13.4
C. Understand the Career Education Concepts	37	38	56.9	59.4	55	38	80.9	56.7
D. Use Community Resources	6	2	9.2	3.1	1	5	1.5	7.5
E. No Response	0	5	0	7.8	0	7	0	10.4
53. Present school preparation for student entry into the world of work is:								
A. Nonexistant	3	1	4.6	1.6	0	0	0	0
B. Minimal	51	48	78.5	75.0	62	49	91.2	73.1
C. Adequate	9	9	13.8	14.1	5	11	7.4	16.4
D. Outstanding	1	1	1.6	1.6	0	0	0	0
E. No Response	1	5	1.5	7.8	1	7	1.5	10.4
54. Present school preparation for citizen responsibility is:								
A. Nonexistant	2	2	3.1	3.1	1	0	1.5	0
B. Minimal	43	36	66.6	56.3	50	40	73.5	59.7
C. Adequate	19	22	29.2	34.4	17	20	25.0	29.9
D. Outstanding	0	0	0	0	0	0	0	0
E. No Response	1	4	1.5	6.3	0	7	0	10.4
55. Present school preparation for development of family responsibility is:								
A. Nonexistant	6	3	9.2	4.7	4	2	5.9	3.0
B. Minimal	44	41	67.7	64.1	45	48	66.2	71.6
C. Adequate	15	16	23.1	25.0	18	10	26.5	14.9
D. Outstanding	0	0	0	0	0	0	0	0
E. No Response	0	4	0	6.3	1	7	1.5	10.4

	CONTROL GROUP				TEST GROUP			
	Pre N	Post N	Pre %	Post %	Pre N	Post N	Pre %	Post %
56. As a teacher, counselor, or administrator, my present degree of competency for implementing career education may be described as:								
A. Very Capable	0	1	0	1.6	2	4	2.9	6.0
B. Capable	18	23	27.7	35.9	33	42	48.5	62.7
C. Weak	35	29	53.8	45.3	26	12	38.2	17.9
D. Unprepared	10	6	15.4	9.4	7	2	10.3	17.9
E. No Response	2	5	3.1	7.8	0	7	0	10.4
57. Where should career education receive the greatest emphasis:								
A. Elementary School	2	3	3.1	4.7	5	5	7.4	7.5
B. Junior High School	4	5	6.2	7.8	4	7	5.9	10.4
C. High School	33	32	50.8	50.0	21	11	30.9	16.4
D. Kindergarten through High School	26	20	40.0	31.3	38	37	55.9	55.2
E. No Response	0	4	0	6.8	0	7	0	10.4
58. Where should career education receive the greatest emphasis?								
A. In the Academic Classroom	2	0	3.1	0	1	1	1.5	1.5
B. In Vocational Subjects	5	7	7.7	10.9	2	3	2.9	4.5
C. In a Career Education Course	6	9	6.2	14.1	5	5	7.4	7.5
D. In All Classes Through an Integrated Program	51	43	78.5	67.2	60	51	88.2	76.1
E. No Response	1	5	1.5	7.8	0	7	0	10.4
59. For the career education concept to have an impact on the school system, it is essential that initial support be provided by:								
A. The Community	31	25	47.7	39.1	25	22	36.8	32.8
B. The Teachers	15	14	23.1	21.9	27	18	39.7	26.9
C. The Administrators	15	13	23.1	20.3	15	16	22.1	23.9
D. The Students	4	5	6.2	7.8	1	2	1.5	3.0
E. No Response	0	7	0	10.9	0	9	0	13.4

	CONTROL GROUP				TEST GROUP			
	Pre N	Post N	Pre %	Post %	Pre N	Post N	Pre %	Post %
60. The first priority for implementing career education is:								
A. To Purchase Commercially Prepared Materials	1	1	1.5	1.6	0	1		1.5
B. To Conduct Teacher Inservice Training	38	42	58.5	65.6	49	44	72.1	65.7
C. To Provide Time for Teachers to Produce Materials	4	1	6.2	1.6	4	6	5.9	9.0
D. To Establish a Career Education Center	18	16	27.7	25.0	14	9	20.6	13.4
E. No Response	4	4	6.2	6.3	1	7	1.5	10.4

Career Education Needs Assessment - Test 2 - Regions-All

Group #2

	CONTROL GROUP				TEST GROUP			
	Pre N	Post N	Pre %	Post %	Pre %	Post %	Pre %	Post %
1. Career education is a continuous learning process that will assist all individuals in decision making through integrated school and community activities. These decisions will be implemented through the process of career awareness, exploration, and preparation, and will be pertinent to the four life roles of the family, citizenship, leisure time, and work.								
A. Strongly Agree	49	60	40.2	50.0	69	84	40.4	49.4
B. Agree	69	54	56.6	45.0	99	77	57.9	45.3
C. Disagree	2	3	1.6	2.5	3	6	1.8	3.5
D. Strongly Disagree	1	2	.8	1.7	0	2	0	1.2
E. No Response	1	1	.8	.8	0	1	0	.6
2. A majority of communities cannot provide opportunities for students to have work experience.								
A. Strongly Agree	12	19	9.8	15.8	20	19	11.7	11.2
B. Agree	49	30	40.2	25.0	56	55	32.7	32.4
C. Disagree	49	54	40.2	45.0	78	70	45.6	41.2
D. Strongly Disagree	12	16	9.8	13.3	17	25	9.9	14.7
E. No Response	0	1	0	.8	0	1	0	.6
3. Instruction should be established on the basis of student career interests.								
A. Strongly Agree	24	30	19.7	25.0	31	42	18.1	24.7
B. Agree	77	78	63.1	65.0	106	98	62.0	57.6
C. Disagree	20	9	16.4	7.5	31	25	18.1	14.7
D. Strongly Disagree	0	1	0	.8	3	3	1.8	1.8
E. No Response	1	2	.8	1.7	0	2	0	1.2

	CONTROL GROUP				TEST GROUP			
	Pre N	Post N	Pre %	Post %	Pre N	Post N	Pre %	Post %
4. People in the community lack the knowledge and teaching experience necessary to make a meaningful contribution to classes.								
A. Strongly Agree	2	6	1.6	5.0	2	7	1.2	4.1
B. Agree	12	21	9.8	17.5	10	12	5.8	7.1
C. Disagree	66	58	54.0	48.3	95	82	55.6	48.2
D. Strongly Disagree	42	34	34.4	28.3	64	68	37.4	40.0
E. No Response	0	1	0	.8	0	1	0	.6
5. The need for students to spend time away from school during the day to secure work experience results in more problems than benefits.								
A. Strongly Agree	2	5	1.6	4.2	2	4	1.2	2.4
B. Agree	9	17	7.4	14.2	19	21	11.1	12.4
C. Disagree	86	74	70.5	61.7	104	96	60.8	56.5
D. Strongly Disagree	25	23	20.5	19.2	45	47	26.3	27.6
E. No Response	0	1	0	.8	1	2	.6	1.2
6. Students would benefit if they could gain more information on vocational programs.								
A. Strongly Agree	29	41	23.8	34.2	53	57	31.0	33.5
B. Agree	86	69	70.5	57.5	111	103	64.9	60.6
C. Disagree	7	6	5.7	5.0	6	8	3.5	4.7
D. Strongly Disagree	0	3	0	2.5	0	1	0	.6
E. No Response	0	1	0	.8	1	1	.6	.6
7. Since large numbers of students are going to college, college preparatory subjects should be stressed more heavily in school.								
A. Strongly Agree	11	15	9.0	12.5	15	23	8.8	13.5
B. Agree	42	38	34.4	31.7	71	68	41.5	40.0
C. Disagree	65	58	53.3	48.3	74	64	43.3	37.6
D. Strongly Disagree	2	6	1.6	5.0	8	11	4.7	6.5
E. No Response	2	3	1.6	2.5	3	4	1.8	2.4

	CONTROL GROUP				TEST GROUP			
	Pre N	Post N	Pre %	Post %	Pre N	Post N	Pre %	Post %
8. Students do not become interested in occupations until the high school years.								
A. Strongly Agree	5	11	4.0	9.2	3	9	1.8	5.3
B. Agree	29	25	23.8	20.8	31	36	18.1	21.2
C. Disagree	61	54	50.0	45.0	94	69	55.0	40.6
D. Strongly Disagree	27	29	22.1	24.2	42	54	24.6	31.8
E. No Response	0	1	0	.8	1	2	.6	1.2
9. Schools provide students with ample occupational information for career planning.								
A. Strongly Agree	1	5	.8	4.2	2	3	1.2	1.8
B. Agree	12	23	9.8	19.2	10	27	5.8	15.9
C. Disagree	75	64	61.4	53.3	106	101	62.0	59.4
D. Strongly Disagree	33	27	27.0	22.5	53	38	31.0	22.4
E. No Response	1	1	.8	.8	0	1	0	.6
10. Preparation for careers is more easily accommodated with large group instruction.								
A. Strongly Agree	0	3	0	2.5	0	2	0	1.2
B. Agree	12	18	9.8	15.0	19	30	11.1	17.6
C. Disagree	83	84	68.0	70.0	119	111	69.6	65.3
D. Strongly Disagree	27	14	22.1	11.7	31	25	18.1	14.7
E. No Response	0	1	0	.8	2	2	1.2	1.2
11. Career placement is a responsibility of the school for all students.								
A. Strongly Agree	22	20	18.0	16.7	17	26	9.9	15.3
B. Agree	46	47	37.7	39.2	76	72	44.4	42.4
C. Disagree	46	44	37.7	36.7	65	60	38.0	35.3
D. Strongly Disagree	8	7	6.6	5.8	10	10	5.8	5.9
E. No Response	0	2	0	1.7	3	2	1.8	1.2

	CONTROL GROUP				TEST GROUP			
	Pre N	Post N	Pre %	Post %	Pre N	Post N	Pre %	Post %
12. Students should select an occupation in the elementary grades and pursue it through their school years.								
A. Strongly Agree	1	3	.8	2.5	0	1	0	.6
B. Agree	6	7	4.9	5.8	1	11	.6	6.5
C. Disagree	56	51	45.9	42.5	96	86	56.1	50.6
D. Strongly Disagree	59	58	48.4	48.3	73	70	42.7	41.2
E. No Response	0	1	0	.8	1	2	.6	1.2
13. Schools will need additional funding to continue career education.								
A. Strongly Agree	23	27	18.9	22.5	34	33	19.9	19.4
B. Agree	85	72	69.7	60.0	119	112	69.6	65.9
C. Disagree	12	13	9.8	10.8	14	17	8.2	10.0
D. Strongly Disagree	1	7	.8	5.8	0	5	0	2.9
E. No Response	1	1	.8	.8	4	3	2.3	1.8
14. Choosing appropriate career goals is a natural outgrowth of the present school program.								
A. Strongly Agree	5	11	4.0	9.2	6	13	3.5	7.6
B. Agree	47	45	38.5	37.5	72	81	42.1	47.6
C. Disagree	63	53	51.6	44.2	84	64	49.1	37.6
D. Strongly Disagree	5	9	4.0	7.5	7	8	4.0	4.7
E. No Response	2	2	1.6	1.7	2	4	1.2	2.4
15. The school is best suited to education; therefore, the community should not be involved in helping students prepare for occupations.								
A. Strongly Agree	1	3	.8	2.5	2	1	1.2	.6
B. Agree	3	7	2.5	5.8	4	9	2.3	5.3
C. Disagree	66	61	54.0	50.8	86	92	50.3	54.1
D. Strongly Disagree	52	48	42.6	40.0	78	67	45.6	39.4
E. No Response	0	1	0	.8	1	1	.6	.6

	CONTROL GROUP				TEST GROUP			
	Pre N	Post N	Pre %	Post %	Pre N	Post N	Pre %	Post %
16. Business people have neither the time nor the inclination to make career-related presentations to school classes.								
A. Strongly Agree	1	5	.8	4.2	1	1	.6	.6
B. Agree	5	4	4.0	3.3	5	8	2.9	4.7
C. Disagree	82	74	67.2	61.7	102	93	59.6	54.7
D. Strongly Disagree	32	36	26.2	30.0	63	67	36.8	39.4
E. No Response	2	1	1.6	.8	0	1	0	.6
17. The training of youth for occupations is more the responsibility of trade and vocational schools than public secondary schools.								
A. Strongly Agree	4	8	3.3	6.7	0	2	0	1.2
B. Agree	11	16	9.0	13.3	24	25	14.0	14.7
C. Disagree	80	79	65.6	65.8	109	108	63.7	63.5
D. Strongly Disagree	27	16	22.1	13.3	36	34	21.0	20.0
E. No Response	0	1	0	.8	2	1	1.2	.6
18. To effectively teach career education concepts will require changes in teachers' methods of instruction.								
A. Strongly Agree	11	12	9.0	10.0	14	12	8.2	7.0
B. Agree	80	75	65.6	62.5	118	119	69.0	70.0
C. Disagree	30	26	24.6	21.7	36	33	21.0	19.4
D. Strongly Disagree	0	6	0	5.0	2	2	1.2	1.2
E. No Response	1	1	.8	.8	1	4	.6	2.4
19. Career information should be provided to all students, regardless of their career goals.								
A. Strongly Agree	57	43	46.7	35.8	64	56	37.4	32.9
B. Agree	61	66	50.0	55.0	103	104	60.2	61.2
C. Disagree	3	6	2.5	5.0	4	8	2.3	4.7
D. Strongly Disagree	1	4	0	.8	0	1	0	.6
E. No Response	0	1	0	.8	0	1	0	.6

N-5

	CONTROL GROUP				TEST GROUP			
	Pre N	Post N	Pre %	Post %	Pre N	Post N	Pre %	Post %
20. Teachers do not have enough time to integrate careers into what they teach.								
A. Strongly Agree	1	3	.8	2.5	2	7	1.2	4.1
B. Agree	21	20	17.2	16.7	27	22	15.8	12.9
C. Disagree	79	71	64.8	59.2	110	105	64.3	61.8
D. Strongly Disagree	21	25	17.2	20.8	31	35	18.1	20.6
E. No Response	0	1	0	.8	1	1	.6	.6
21. Schools are doing an adequate job of preparing students for the world of work.								
A. Strongly Agree	0	6	0	5.0	0	1	0	.6
B. Agree	13	13	10.7	10.8	28	24	16.4	14.1
C. Disagree	75	80	61.5	66.7	100	104	58.5	61.2
D. Strongly Disagree	34	20	27.9	16.7	42	39	24.6	22.9
E. No Response	0	1	0	.8	1	2	.6	1.2
22. Descriptive occupational brochures are the best means of providing students with information for making career choices.								
A. Strongly Agree	1	5	.8	4.2	0	3	0	1.8
B. Agree	14	20	11.5	16.7	20	21	11.7	12.4
C. Disagree	86	73	70.5	60.8	115	108	67.3	63.5
D. Strongly Disagree	21	21	17.2	17.5	36	37	21.0	21.8
E. No Response	0	1	0	.8	0	1	0	.6
23. Career development begins in early childhood.								
A. Strongly Agree	20	29	16.4	24.2	24	40	14.0	23.5
B. Agree	69	66	56.6	55.0	103	88	60.2	51.8
C. Disagree	26	20	21.3	16.7	41	32	24.0	18.8
D. Strongly Disagree	5	4	4.0	3.3	0	7	0	4.1
E. No Response	2	1	1.6	.8	3	3	1.8	1.8

	CONTROL GROUP				TEST GROUP			
	Pre N	Post N	Pre %	Post %	Pre N	Post N	Pre %	Post %
24. Preparation for life should center on learning academic subjects.								
A. Strongly Agree	2	7	1.6	5.8	1	3	.6	1.8
B. Agree	24	30	19.7	25.0	42	41	24.6	24.1
C. Disagree	77	71	63.1	59.2	113	112	66.0	65.9
D. Strongly Disagree	18	11	14.8	9.2	13	13	7.6	7.6
E. No Response	1	1	.8	.8	2	1	1.2	.6
25. The successful implementation of career education is dependent on class size.								
A. Strongly Agree	7	11	5.7	9.2	4	10	2.3	5.9
B. Agree	50	49	41.0	40.8	80	66	46.8	38.8
C. Disagree	52	49	42.6	40.8	70	79	40.9	46.5
D. Strongly Disagree	10	9	8.2	7.5	13	14	7.6	8.2
E. No Response	3	2	2.5	1.7	4	1	2.3	.6
26. Since students have a lifetime to prepare for work, they should spend their school time on academic subjects.								
A. Strongly Agree	1	4	.8	3.3	1	3	.6	1.8
B. Agree	3	10	2.5	8.3	12	18	7.0	10.6
C. Disagree	91	90	74.6	75.0	132	121	77.2	71.2
D. Strongly Disagree	25	15	20.5	12.5	26	27	15.2	15.9
E. No Response	2	1	1.6	.8	0	1	0	.6
27. Teachers are aware of career resources in their community.								
A. Strongly Agree	1	6	.8	5.0	2	6	1.2	3.5
B. Agree	22	27	18.0	22.5	45	44	26.3	25.9
C. Disagree	89	70	73.0	58.3	109	100	63.7	58.8
D. Strongly Disagree	9	15	7.4	12.5	12	16	7.0	9.4
E. No Response	1	2	.8	1.7	3	4	1.8	2.4

	CONTROL GROUP				TEST GROUP			
	Pre N	Post N	Pre %	Post %	Pre N	Post N	Pre %	Post %
28. Since automation is rapidly changing the roles in the world of work, students need only a general education.								
A. Strongly Agree	0	2	0	1.7	0	2	0	1.2
B. Agree	6	9	4.9	7.5	5	8	2.9	4.7
C. Disagree	78	79	64.0	65.8	118	111	69.0	65.3
D. Strongly Disagree	38	29	31.1	24.2	46	48	26.9	28.2
E. No Response	0	1	0	.8	2	1	1.2	.6
29. If a person is positive of the career he wants to enter, there is no need to explore other alternatives.								
A. Strongly Agree	0	2	0	1.7	2	0	1.2	0
B. Agree	2	11	1.6	9.2	4	8	2.3	4.7
C. Disagree	81	75	66.4	62.5	113	115	66.0	67.6
D. Strongly Disagree	38	31	31.1	25.8	52	45	30.4	26.5
E. No Response	1	1	.8	.8	0	2	0	1.2
30. Individuals can be happy and successful in life even if they do not like their careers.								
A. Strongly Agree	0	4	0	3.3	1	1	.6	.6
B. Agree	16	14	13.1	11.7	15	10	8.8	5.9
C. Disagree	52	60	42.6	50.0	92	86	53.8	50.6
D. Strongly Disagree	53	41	43.4	34.2	63	71	36.8	41.8
E. No Response	1	1	.8	.8	0	2	0	1.2
31. Schools should stress the dignity of workers in their curriculums, regardless of the tasks those workers perform.								
A. Strongly Agree	50	50	41.0	41.7	69	62	40.4	36.5
B. Agree	68	60	55.7	50.0	85	87	49.7	51.2
C. Disagree	4	8	3.3	6.7	14	14	8.2	8.2
D. Strongly Disagree	0	1	0	.8	2	5	1.2	2.9
E. No Response	0	1	0	.8	1	2	.6	1.2

	CONTROL GROUP				TEST GROUP			
	Pre N	Post N	Pre %	Post %	Pre N	Post N	Pre %	Post %
32. Individuals who are outstanding in academic achievement will be successful in their chosen careers.								
A. Strongly Agree	0	2	0	1.7	1	5	.6	2.9
B. Agree	15	24	12.3	20.0	19	26	11.1	15.3
C. Disagree	82	72	67.2	60.0	123	110	71.9	64.7
D. Strongly Disagree	25	21	20.5	17.5	23	27	13.5	15.9
E. No Response	0	1	0	.8	5	2	2.9	1.2
33. Individuals who are outstanding in extracurricular activities at school will be successful in their chosen careers.								
A. Strongly Agree	1	0	.8	0	0	4	0	2.4
B. Agree	19	31	15.6	25.8	31	39	18.1	22.9
C. Disagree	86	69	70.5	57.5	119	103	69.6	60.6
D. Strongly Disagree	15	18	12.3	15.0	17	21	9.9	12.4
E. No Response	1	2	.8	1.7	4	3	2.3	1.8
34. Classroom instruction is a valuable vehicle for helping students gain an appreciation of the value and importance of work.								
A. Strongly Agree	11	19	9.0	15.8	21	35	12.3	20.6
B. Agree	85	82	69.7	68.3	118	118	69.0	69.4
C. Disagree	22	17	18.0	14.2	28	13	16.4	7.6
D. Strongly Disagree	2	1	1.6	.8	1	1	.6	.6
E. No Response	2	1	1.6	.8	3	3	1.8	1.8
35. Schools make a positive contribution in helping students gain an appreciation of the value and importance of work.								
A. Strongly Agree	8	10	6.6	8.3	7	14	4.0	8.2
B. Agree	58	65	47.5	54.2	92	93	53.8	54.7
C. Disagree	54	41	44.3	34.2	64	56	37.4	32.9
D. Strongly Disagree	2	3	1.6	2.5	2	2	1.2	1.2
E. No Response	0	1	0	.8	6	5	3.5	2.9

	CONTROL GROUP				TEST GROUP			
	Pre N	Post N	Pre %	Post %	Pre N	Post N	Pre %	Post %
36. Today there is little need for retraining once a person becomes established in a career.								
A. Strongly Agree	0	3	0	2.5	1	1	.6	.6
B. Agree	4	9	3.3	7.5	7	9	4.1	5.3
C. Disagree	82	76	67.2	63.3	106	109	62.0	64.1
D. Strongly Disagree	36	31	29.5	25.8	57	50	33.3	29.4
E. No Response	0	1	0	.8	0	1	0	.6
37. School programs are instrumental in helping students decide upon careers.								
A. Strongly Agree	5	9	4.0	7.5	3	9	1.6	5.3
B. Agree	66	60	54.0	50.0	89	92	52.0	54.1
C. Disagree	47	45	38.5	37.5	69	58	40.4	34.1
D. Strongly Disagree	4	5	3.3	4.2	9	6	5.3	3.5
E. No Response	0	1	0	.8	1	5	.6	2.9
38. School programs help students understand how important careers are in making a better society.								
A. Strongly Agree	3	7	2.5	5.8	3	11	1.8	6.5
B. Agree	65	57	53.3	47.5	107	95	62.6	55.9
C. Disagree	50	46	41.0	38.3	52	56	30.4	32.9
D. Strongly Disagree	4	8	3.3	6.7	6	4	3.5	2.4
E. No Response	0	2	0	1.7	3	4	1.8	2.4
39. School programs help instill a desire in students to explore and evaluate various job potentials and future career opportunities.								
A. Strongly Agree	6	5	4.9	4.2	5	8	2.9	4.7
B. Agree	50	53	41.0	44.2	88	86	51.5	50.6
C. Disagree	55	53	45.1	44.2	72	68	42.1	40.0
D. Strongly Disagree	10	8	8.2	6.7	4	4	2.3	2.4
E. No Response	1	1	.8	.8	2	4	1.2	2.4

N-10

	CONTROL GROUP				TEST GROUP			
	Pre N	Post N	Pre %	Post %	Pre N	Post N	Pre %	Post %
40. If an individual does not like the work which is part of his or her career, the solution is to change jobs.								
A. Strongly Agree	10	12	8.2	10.0	16	15	9.4	8.8
B. Agree	58	56	47.5	46.7	89	86	52.0	50.6
C. Disagree	50	47	41.0	39.2	57	60	33.3	35.3
D. Strongly Disagree	4	3	3.3	2.5	1	5	.6	2.9
E. No Response	0	2	0	1.7	8	4	4.7	2.4
41. Career success is primarily dependent upon attitudes.								
A. Strongly Agree	28	36	23.0	30.0	39	40	22.8	23.5
B. Agree	81	65	66.4	54.2	120	112	70.2	65.9
C. Disagree	11	16	9.0	13.3	11	16	6.4	9.4
D. Strongly Disagree	1	1	.8	.8	0	0	0	0
E. No Response	1	2	.8	1.7	1	2	.6	1.2
42. Every class could be instrumental in helping students make decisions about careers.								
A. Strongly Agree	20	28	16.4	23.3	25	27	14.6	15.9
B. Agree	83	75	68.0	62.5	109	104	63.7	61.2
C. Disagree	18	15	14.8	12.5	34	36	19.9	21.2
D. Strongly Disagree	1	1	.8	.8	2	2	1.2	1.2
E. No Response	0	1	0	.8	1	1	.6	.6
43. It is difficult to learn an occupation without having actual work experience in that occupation.								
A. Strongly Agree	29	19	23.8	15.8	41	43	24.0	25.3
B. Agree	73	77	60.0	64.2	106	97	62.0	57.1
C. Disagree	16	17	13.1	14.2	21	26	12.3	15.3
D. Strongly Disagree	4	6	3.3	5.0	2	2	1.2	1.2
E. No Response	0	1	0	.8	1	2	.6	1.2

	CONTROL GROUP				TEST GROUP			
	Pre N	Post N	Pre %	Post %	Pre N	Post N	Pre %	Post %
44. "Hands-on" work experience is essential for effective career exploration.								
A. Strongly Agree	27	25	22.1	20.8	42	56	24.6	32.9
B. Agree	78	74	63.9	61.7	114	102	66.7	60.0
C. Disagree	15	15	12.3	12.5	12	11	7.0	6.5
D. Strongly Disagree	0	2	0	1.7	1	0	.6	0
E. No Response	2	4	1.6	3.3	2	1	1.2	.6
45. "Hands-on" work experience is essential in order to gain effective career awareness.								
A. Strongly Agree	22	26	18.0	21.7	37	54	21.6	31.8
B. Agree	79	72	64.8	60.0	116	94	67.8	55.3
C. Disagree	18	16	14.8	13.3	16	20	9.4	11.8
D. Strongly Disagree	1	2	.8	1.7	0	1	0	.6
E. No Response	2	4	1.6	3.3	2	1	1.2	.6
46. For how many occupations have you actually studied of prepared?								
A. One	34	34	27.9	28.3	41	50	24.0	29.4
B. Two	48	45	39.3	37.5	64	69	37.4	40.6
C. Three	23	28	18.9	23.3	34	28	19.9	16.5
D. Four or More	17	11	13.9	9.2	30	21	17.5	12.4
E. No Response	0	2	0	1.7	2	2	1.2	1.2
47. In how many occupations have you been employed?								
A. One	20	23	16.4	19.2	25	31	14.6	18.2
B. Two	25	28	20.5	23.3	29	33	17.0	19.4
C. Three	34	27	27.9	22.5	55	55	32.2	32.4
D. Four or More	43	37	35.2	30.8	56	49	32.7	28.8
E. No Response	0	5	0	4.2	6	2	3.5	1.2

	CONTROL GROUP				TEST GROUP			
	Pre N	Post N	Pre %	Post %	Pre N	Post N	Pre %	Post %
48. For how many of occupations in which you have been employed were you not formally prepared?								
A. None	34	27	27.9	22.5	49	41	28.7	24.1
B. One	34	35	27.9	29.2	46	46	26.9	27.1
C. Two	26	34	21.3	28.3	36	52	21.0	30.6
D. Three or More	28	20	23.0	16.7	38	29	22.2	17.1
E. No Response	0	4	0	3.3	2	2	1.2	1.2
49. Which school personnel are most influential in effective career decision making?								
A. Counselors	35	25	28.7	20.8	26	26	15.2	15.3
B. Teachers	53	64	43.4	53.3	101	110	59.0	64.7
C. Cocurricular Supervisors	9	5	7.4	4.2	11	7	6.4	4.1
D. No One in School	23	24	18.9	20.0	30	23	17.5	13.5
E. No Response	2	2	1.6	1.7	3	4	1.8	2.4
50. During the last school year, how many educational field trips did your class take?								
A. None	63	53	51.6	44.2	93	82	54.4	48.2
B. One to Three	39	42	32.0	35.0	45	64	26.3	37.6
C. Four or Five	4	4	3.3	3.3	7	5	4.1	2.9
D. Six or More	2	7	1.6	5.8	7	4	4.1	2.4
E. No Response	14	14	11.5	11.7	19	15	11.1	8.8
51. During the last school year, how many community resource persons did you coordinate into your classroom instruction?								
A. None	64	46	52.5	38.3	85	69	49.7	40.6
B. One to Three	29	33	23.8	27.5	30	50	17.5	29.4
C. Four to Five	5	11	4.0	9.2	9	15	5.3	8.8
D. Six or More	4	10	3.3	8.3	23	19	13.5	11.2
E. No Response	20	20	16.4	16.7	24	17	14.0	10.0

	CONTROL GROUP				TEST GROUP			
	Pre N	Post N	Pre %	Post %	Pre N	Post N	Pre %	Post %
52. To effectively infuse the career education concept with existing courses, it is necessary that the teacher first:								
A. Develop Career Education Materials	9	8	7.4	6.7	10	21	5.8	12.4
B. Be Aware of Various Occupations	35	35	28.7	29.2	39	46	22.8	27.1
C. Understand the Career Education Concepts	60	58	49.2	48.3	93	74	54.4	43.5
D. Use Community Resources	14	14	11.5	11.7	24	19	14.0	11.2
E. No Response	4	5	3.3	4.2	5	10	2.9	5.9
53. Present school preparation for student entry into the world of work is:								
A. Nonexistant	4	7	3.3	5.8	3	3	1.8	1.8
B. Minimal	102	95	83.6	79.2	141	139	82.5	81.8
C. Adequate	15	13	12.3	10.8	24	24	14.0	14.1
D. Outstanding	1	3	.8	2.5	2	2	1.2	1.2
E. No Response	0	2	0	1.7	1	2	.6	1.2
54. Present school preparation for citizen responsibility is:								
A. Nonexistant	7	7	5.7	5.8	8	7	4.7	4.1
B. Minimal	80	74	65.6	61.7	105	107	61.4	62.9
C. Adequate	35	36	28.7	30.0	56	51	32.7	30.0
D. Outstanding	0	2	0	1.7	2	3	1.2	1.8
E. No Response	0	1	0	.8	0	2	0	1.2
55. Present school preparation for development of family responsibility is:								
A. Nonexistant	17	16	13.1	13.3	17	11	9.9	6.5
B. Minimal	80	78	65.6	65.0	114	120	66.7	70.6
C. Adequate	24	24	19.7	20.0	38	33	22.2	19.4
D. Outstanding	1	1	.8	.8	2	4	1.2	2.4
E. No Response	0	1	0	.8	0	2	0	1.2

	CONTROL GROUP				TEST GROUP			
	Pre N	Post N	Pre %	Post %	Pre N	Post N	Pre %	Post %
56. As a teacher, counselor, or administrator, my present degree of competency for implementing career education may be described as:								
A. Very Capable	3	8	2.5	6.7	8	8	4.7	4.7
B. Capable	43	46	35.2	38.3	53	75	31.0	44.1
C. Weak	55	49	45.0	40.8	68	60	39.8	35.3
D. Unprepared	15	9	12.3	7.5	34	19	19.9	11.2
E. No Response	6	8	4.9	6.7	8	8	4.7	4.7
57. Where should career education receive the greatest emphasis:								
A. Elementary School	3	6	2.4	5.0	2	14	1.2	8.2
B. Junior High School	10	11	8.2	9.2	21	18	12.3	10.6
C. High School	60	57	49.2	47.5	73	67	42.7	39.4
D. Kindergarten through High School	46	43	37.7	35.8	71	66	41.5	38.8
E. No Response	3	3	2.4	2.5	4	5	2.3	2.9
58. Where should career education receive the greatest emphasis?								
A. In the Academic Classroom	2	3	1.6	2.5	4	7	2.3	4.1
B. In Vocational Subjects	2	7	1.6	5.8	7	14	4.1	8.2
C. In a Career Education Course	24	21	19.7	17.5	22	21	12.9	12.4
D. In All Classes Through an Integrated Program	93	88	76.2	73.3	136	126	79.6	74.1
E. No Response	1	1	.8	.8	2	2	1.2	1.2
59. For the career education concept to have an impact on the school system, it is essential that initial support be provided by:								
A. The Community	70	68	57.4	56.7	97	99	56.7	58.2
B. The Teachers	20	20	16.4	16.7	32	25	18.7	14.7
C. The Administrators	21	18	17.2	15.0	23	23	13.5	13.5
D. The Students	9	11	7.4	9.2	14	17	8.2	10.0
E. No Response	2	3	1.6	2.5	5	6	2.9	3.5

	CONTROL GROUP				TEST GROUP			
	Pre N	Post N	Pre %	Post %	Pre N	Post N	Pre %	Post %
60. The first priority for implementing career education is:								
A. To Purchase Commercially Prepared Materials	4	2	3.3	1.7	0	1	0	.6
B. To Conduct Teacher Inservice Training	68	81	55.7	67.5	98	102	57.3	60.0
C. To Provide Time for Teachers to Produce Materials	7	9	5.7	7.5	12	18	7.0	10.6
D. To Establish a Career Education Center	42	25	34.4	20.8	55	43	32.2	25.3
E. No Response	1	3	.8	2.5	6	6	3.5	3.5

CAREER KNOWLEDGE TEST RESULTS

TEST 3 -- ALL REGIONS

Test 3 - All Regions

CAREER KNOWLEDGE
Test Results

Tools

Control Group					Experimental Group				
Response Mode	Frequency of Responses Correct PRE	POST	% of Responses Correct PRE	POST	Response Mode	Frequency of Responses Correct PRE	POST	% of Responses Correct PRE	POST
0	2	32	1.3	20.4	0	2	26	.9	11.7
1	0	0	0	0	1	0	1	0	.4
2	0	0	0	0	2	0	0	0	0
3	1	0	.6	0	3	5	2	2.2	.9
4	1	2	.6	1.3	4	5	2	2.2	.9
5	4	1	2.5	.6	5	15	4	6.5	1.8
6	10	7	6.3	4.5	6	17	10	7.4	4.5
7	29	16	18.4	10.2	7	3[illegible]	26	13.5	11.6
8	38	30	24.1	19.1	8	40	37	17.5	16.6
9	41	36	25.9	22.9	9	75	57	32.8	25.6
10	32	33	20.3	21.0	10	39	58	17.0	26.0

Test 3 - All Regions

CAREER KNOWLEDGE
Test Results

Similarities

Control Group					Experimental Group				
Response Mode	Frequency of Responses Correct PRE	POST	% of Responses Correct PRE	POST	Response Mode	Frequency of Responses Correct PRE	POST	% of Responses Correct PRE	POST
0	2	29	1.3	18.5	0	1	24	.4	10.8
1	1	0	.6	0	1	0	0	0	0
2	2	1	1.3	.6	2	2	1	.9	.4
3	9	2	15.7	1.3	3	9	2	3.9	.9
4	10	6	6.3	3.8	4	26	14	11.4	6.3
5	17	7	10.7	4.5	5	39	24	17.0	10.8
6	40	28	25.3	17.8	6	49	31	21.4	13.9
7	42	33	26.7	21.0	7	50	54	21.8	24.2
8	24	29	15.2	18.5	8	37	44	16.2	19.7
9	10	19	6.3	12.1	9	14	29	6.1	13.0
10	1	3	.6	1.9	10	2	0	.9	0

Test 3 - All Regions

CAREER KNOWLEDGE
Test Results

Differences

Control Group					Experimental Group				
Response Mode	Frequency of Responses Correct PRE	POST	% of Responses Correct PRE	POST	Response Mode	Frequency of Responses Correct PRE	POST	% of Responses Correct PRE	POST
0	4	31	2.5	19.7	0	4	24	1.7	10.8
1	8	3	5.0	1.9	1	7	5	3.1	2.2
2	9	12	5.7	7.7	2	15	8	6.5	3.6
3	11	8	7.0	5.1	3	17	12	7.4	5.4
4	13	5	8.2	3.2	4	24	10	10.5	4.5
5	18	8	11.4	5.1	5	22	15	9.6	6.7
6	26	15	16.5	9.6	6	37	28	16.2	12.5
7	33	35	20.9	22.3	7	49	57	21.4	25.6
8	26	31	16.5	19.7	8	48	60	21.0	26.9
9	9	9	5.7	5.7	9	6	4	2.6	1.8
10	1	0	.6	0	10	0	0	0	0

Career Education Needs Assessment - Test 4 - All Regions

	CONTROL GROUP				TEST GROUP			
	Pre N	Post N	Pre %	Post %	Pre N	Post N	Pre %	Post %
1. Which of the following occupations is a public service?								
A. Bucker	83	75	15.3	14.6	58	64	11.4	13.3
B. Building Inspector	247	202	45.5	39.5	274	200	53.6	41.5
C. Store Clerk	131	121	24.1	23.6	135	150	26.4	31.2
D. Tool & Die Maker	74	48	13.6	9.4	43	22	8.4	4.6
E. No Response	8	66	1.5	12.9	1	45	.2	9.4
2. Which of the following would be found in a machine shop?								
A. Welder	345	322	63.5	62.9	326	342	63.8	71.1
B. Farrier	34	27	6.3	5.3	28	26	5.5	5.4
C. Rock Drill Operator	59	45	10.9	8.8	81	42	15.8	8.7
D. Grinder Operator	101	54	18.6	10.5	76	25	14.9	5.2
E. No Response	4	64	.7	12.5	0	46	-	9.6
3. Heavy equipment operators do which of the following?								
A. Drive Bulldozers	339	282	62.4	55.1	316	342	61.8	71.1
B. Operate Printing Machines	128	100	23.6	19.5	112	36	21.9	7.5
C. Weld	31	30	5.7	5.9	40	30	7.8	6.2
D. Operate Furnaces	40	35	7.4	6.8	40	25	7.8	5.2
E. No Response	5	65	.9	12.7	3	48	.6	10.0
4. An understanding of soils is needed for which of the following occupations?								
A. Entomologist	70	50	12.9	9.8	82	52	16.0	10.8
B. Farmer	345	324	63.5	63.3	322	333	63.0	69.2
C. Launderer	71	37	13.1	7.2	57	15	11.2	3.1
D. Grain Miller	50	35	9.2	6.8	47	35	9.2	7.3
E. No Response	7	66	1.3	12.9	3	46	.6	9.6

P-1

	CONTROL GROUP				TEST GROUP			
	Pre N	Post N	Pre %	Post %	Pre N	Post N	Pre %	Post %
5. Which of the following occupations is not involved in marketing?								
A. Sales Clerk	73	30	13.4	5.9	51	20	10.0	4.2
B. Auctioneer	84	61	15.5	11.9	68	49	13.3	10.2
C. Auto Repair	212	203	39.0	39.6	232	233	45.4	48.3
D. Travel Agent	170	154	31.4	30.1	159	134	31.1	27.9
E. No Response	4	64	.7	12.5	1	45	.2	9.4
6. A barber should have training in which of the following?								
A. Personal Services	278	274	51.2	53.5	279	295	54.6	61.3
B. Manufacturing	79	31	14.5	6.1	71	41	13.9	8.5
C. Fine Arts	61	61	11.3	11.9	57	48	11.6	10.0
D. Recreation	117	80	21.5	15.6	101	51	19.8	10.6
E. No Response	8	66	1.5	12.9	3	46	.6	9.6
7. Which of the following is not an occupation related to health services?								
A. Anesthetist	180	178	33.2	34.8	201	163	39.3	33.9
B. Dietician	124	75	22.8	14.6	109	60	21.3	12.5
C. Dental Assistant	88	40	16.2	7.8	48	24	9.4	5.0
D. Nurseryman	147	153	27.1	29.9	152	188	29.7	39.0
E. No Response	4	66	.7	12.9	1	46	.2	9.6
8. The occupation of script editor is not found in which of the following businesses?								
A. Television	73	51	13.4	10.0	49	47	9.6	9.8
B. Newspaper	33	28	6.1	5.4	44	33	8.6	6.9
C. Book Publishing	81	63	14.9	12.3	89	53	17.4	8.9
D. Telephone	350	305	64.5	59.6	328	303	64.2	63.0
E. No Response	6	65	1.1	12.7	1	45	.2	9.4

P-2

	CONTROL GROUP				TEST GROUP			
	Pre N	Post N	Pre %	Post %	Pre N	Post N	Pre %	Post %
9. Which of the following is not an occupation found in offices?								
A. Stenographer	141	137	26.0	26.8	165	150	32.3	31.2
B. Transcriber	109	73	20.1	14.3	102	75	20.0	15.6
C. Desk Clerk	79	39	14.5	7.5	56	24	11.0	5.0
D. Time Keeper	209	198	38.5	38.7	185	185	36.2	38.4
E. No Response	5	65	.9	12.7	3	47	.6	9.8
10. Which of the following occupations is involved with the environment?								
A. Traffic Controller	108	56	19.9	10.9	86	50	16.8	10.4
B. Water Conservationist	135	136	24.9	26.6	172	147	33.7	30.6
C. Pneumatic Tester	89	52	16.4	10.2	75	52	14.7	10.8
D. All of the Above	202	202	37.1	39.5	177	187	34.6	38.9
E. No Response	9	66	1.7	12.8	1	45	.2	9.3
11. A floriculturist does which of the following?								
A. Grinds Flour	115	58	21.2	11.3	103	84	20.2	17.5
B. Manages Turf	126	97	23.2	18.9	113	96	22.1	20.0
C. Grows Flowers	239	250	44.0	48.9	222	211	43.4	43.8
D. Cuts Trees	53	38	9.8	7.4	68	42	13.3	8.7
E. No Response	10	69	1.8	13.5	5	48	1.0	10.0
12. A truck driver does not do which of the following?								
A. Repairs Motors	277	284	51.0	55.4	285	261	55.8	54.3
B. Reads Maps	48	23	8.8	4.5	43	21	8.4	4.4
C. Keeps Records	192	132	35.4	25.8	156	133	11.0	27.6
D. Drives	21	6	3.9	1.2	22	18	4.3	3.7
E. No Response	5	67	.9	13.1	5	48	1.0	10.0

P-3

	CONTROL GROUP				TEST GROUP			
	Pre N	Post N	Pre %	Post %	Pre N	Post N	Pre %	Post %
13. A cabinetmaker does which of the following?								
A. Builds Cabins	259	208	47.7	40.6	248	188	48.5	39.1
B. Constructs Doors	124	143	22.8	27.9	130	140	25.4	29.1
C. Landscapes	95	59	17.6	11.5	65	65	12.7	13.5
D. Welds	54	37	9.9	7.3	66	41	12.9	8.5
E. No Response	11	65	2.0	12.7	2	47	.4	9.8
14. An interior decorator does which of the following?								
A. Designs Houses	101	96	18.6	18.8	110	78	21.5	16.2
B. Makes Clothes	93	43	17.1	8.4	62	34	12.1	7.1
C. Makes Sculptures	77	48	14.2	9.4	63	32	12.3	6.7
D. Decorates Homes	268	257	49.4	50.2	273	289	1423	60.1
E. No Response	4	68	.7	13.2	3	48	.6	10.0
15. A park ranger does which of the following?								
A. Logging	47	27	8.7	5.3	45	26	8.8	5.4
B. Grows Christmas Trees	43	21	7.9	4.1	37	18	7.2	3.7
C. Manages Camp Areas	357	318	65.7	62.1	354	306	69.3	63.6
D. All of the Above	93	79	17.1	15.4	74	85	14.5	17.7
E. No Response	3	67	.6	13.1	1	46	.2	9.6
16. A person who reports and discusses news on radio and television is which of the following?								
A. News Reporter	346	298	63.8	58.3	322	263	63.0	54.7
B. News Commentator	119	97	21.9	18.9	117	127	22.9	26.4
C. News Editor	50	40	9.2	7.8	53	31	10.4	6.4
D. News Writer	24	13	4.4	2.5	18	15	3.5	3.1
E. No Response	4	64	.7	12.5	1	45	.2	9.4

P-4

	CONTROL GROUP				TEST GROUP			
	Pre N	Post N	Pre %	Post %	Pre N	Post N	Pre %	Post %
17. A person who examines various types of water life is which of the following?								
A. Sanitary Engineer	81	45	14.9	8.8	62	31	12.1	6.4
B. Water Tender	233	173	42.9	33.8	194	137	38.0	28.5
C. Marine Biologist	159	183	29.3	35.7	181	215	35.4	44.7
D. Agriculture Inspector	65	44	12.0	8.6	71	52	13.9	10.8
E. No Response	5	67	.9	13.1	3	46	.6	9.6
18. A person who leads a musical ensemble is which of the following?								
A. Arranger	45	27	8.3	5.3	52	17	10.2	3.5
B. Counselor	64	34	11.8	6.6	45	19	8.8	4.0
C. Composer	92	74	16.9	14.5	99	71	19.4	14.8
D. Conductor	339	312	62.4	60.9	313	327	61.3	67.9
E. No Response	3	65	.6	12.7	2	47	.4	9.8
19. A person who repairs furniture is which of the following?								
A. Seamstress	39	41	7.2	8.0	51	35	10.0	7.3
B. Upholsterer	276	258	50.8	50.4	248	262	48.5	54.4
C. Furniture Salesperson	175	104	32.2	20.3	153	97	29.9	20.2
D. Cabinet maker	47	45	8.7	8.8	54	41	10.6	8.5
E. No Response	6	64	1.1	12.5	5	46	1.0	9.6
20. A person who is the chief executive of an elementary school is which of the following?								
A. Teacher	41	31	7.5	6.0	38	24	7.4	5.0
B. School board Member	121	84	22.3	16.4	95	60	18.6	12.5
C. Counselor	83	71	15.3	13.9	67	64	13.1	13.3
D. Principal	292	261	53.8	51.0	309	288	60.5	59.8
E. No Response	6	65	1.1	12.7	2	45	.4	9.4

	CONTROL GROUP				TEST GROUP			
	Pre N	Post N	Pre %	Post %	Pre N	Post N	Pre %	Post %
21. People select an occupation after they get out of school.								
A. Agree	194	160	35.7	31.3	218	164	42.7	34.1
B. Disagree	234	217	43.1	42.4	175	197	34.2	41.0
C. Don't know	107	65	19.7	12.7	103	70	20.2	14.6
D. Blank	5	4	.9	.8	10	4	1.9	.7
E. No Response	3	66	.6	12.8	5	46	1.0	9.6
22. If you graduate from college, you get a good job.								
A. Agree	305	243	56.2	47.5	279	225	54.6	46.8
B. Disagree	164	146	30.2	28.5	151	153	29.5	31.8
C. Don't know	58	57	10.7	11.1	75	53	14.7	11.0
D. Blank	11	2	2.0	.4	5	3	1.0	.6
E. No Response	5	64	.9	12.5	1	47	.2	9.8
23. An important part of any job is getting along with people.								
A. Agree	394	371	72.6	72.4	400	328	78.2	79.4
B. Disagree	40	30	7.4	5.9	52	29	10.2	6.0
C. Don't know	52	22	9.6	4.3	34	20	6.7	4.2
D. Blank	53	24	9.7	4.7	24	3	4.7	.6
E. No Response	4	65	.7	12.7	1	47	.2	9.8
24. Knowing what you don't like will help you decide what kind of work you would like to do.								
A. Agree	330	291	60.8	56.8	333	313	65.2	65.1
B. Disagree	109	88	20.1	17.2	98	64	19.2	13.3
C. Don't know	88	67	16.2	13.1	74	54	14.5	11.2
D. Blank	9	2	1.6	.4	2	2	.4	.4
E. No Response	7	64	1.3	12.5	4	48	.7	10.0

	CONTROL GROUP				TEST GROUP			
	Pre N	Post N	Pre %	Post %	Pre N	Post N	Pre %	Post %
25. Parents decide what occupations their children will have.								
A. Agree	73	35	13.4	6.8	62	34	12.1	7.1
B. Disagree	388	372	71.5	72.7	378	358	74.0	74.4
C. Don't know	60	32	11.0	6.3	62	39	12.1	8.1
D. Blank	16	8	2.9	1.6	5	3	1.0	.6
E. No Response	6	65	1.2	12.6	4	47	.8	9.8
26. People can do any kind of work they want.								
A. Agree	247	186	45.5	36.3	254	201	49.6	41.8
B. Disagree	222	200	40.9	39.1	191	176	37.4	36.6
C. Don't know	54	55	9.9	10.7	58	53	11.4	11.0
D. Blank	6	7	1.1	1.4	5	4	1.0	.8
E. No Response	14	64	2.6	12.5	3	47	.6	9.8
27. Every kind of work is important.								
A. Agree	386	347	71.1	67.8	306	342	75.5	71.1
B. Disagree	65	57	12.0	11.1	69	49	13.5	10.2
C. Don't know	58	38	10.7	7.4	45	41	8.8	8.5
D. Blank	9	3	1.6	.6	5	3	1.0	.6
E. No Response	25	67	4.6	13.1	6	46	1.2	9.6
28. Satisfaction in your occupation will result in a more enjoyable home life.								
A. Agree	270	276	49.7	53.8	300	309	58.7	64.2
B. Disagree	78	45	14.4	8.8	73	48	14.3	10.0
C. Don't know	146	115	26.9	22.5	128	75	25.0	15.6
D. Blank	12	6	2.2	1.2	5	3	1.0	.6
E. No Response	37	70	6.8	13.7	5	46	1.0	9.6

	CONTROL GROUP				TEST GROUP			
	Pre N	Post N	Pre %	Post %	Pre N	Post N	Pre %	Post %
29. People learn more from reading about things than doing them.								
A. Agree	118	96	21.7	18.8	133	79	26.0	16.4
B. Disagree	286	265	52.7	51.8	280	280	54.8	58.2
C. Don't know	87	71	16.0	13.8	85	71	16.6	14.8
D. Blank	12	3	2.2	.6	7	4	1.4	.8
E. No Response	40	77	7.4	15.0	6	47	1.2	9.8
30. If you make a decision you are responsible for the result.								
A. Agree	306	288	56.4	56.3	312	318	61.0	66.1
B. Disagree	79	65	14.5	12.7	91	48	17.8	10.0
C. Don't know	89	75	16.4	14.6	89	67	17.4	13.9
D. Blank	15	4	2.8	.8	11	1	2.2	.2
E. No Response	54	80	9.9	15.6	8	47	1.6	9.8
31. The subjects you study in school are important only if you want to go to college.								
A. Agree	173	103	31.9	20.1	153	103	29.9	21.4
B. Disagree	327	311	60.2	60.7	305	293	59.7	60.9
C. Don't know	34	30	6.3	5.9	49	37	9.6	7.7
D. Blank	3	4	.6	.8	3	2	.6	.4
E. No Response	6	64	1.0	12.5	1	46	.2	9.5
32. Hobbies are an important part of life.								
A. Agree	286	277	52.7	54.1	290	281	56.8	59.4
B. Disagree	131	81	24.1	15.8	120	77	23.5	16.0
C. Don't know	109	87	20.1	17.0	95	75	18.6	15.6
D. Blank	9	3	1.6	.6	3	2	.6	.4
E. No Response	8	64	1.5	12.5	3	46	.5	9.6

	CONTROL GROUP				TEST GROUP			
	Pre N	Post N	Pre %	Post %	Pre N	Post N	Pre %	Post %
33. Every person has responsibilities to his or her community.								
A. Agree	367	343	67.6	6.7	352	356	68.9	74.0
B. Disagree	68	47	12.5	9.1	66	30	12.9	6.2
C. Don't know	88	50	16.2	9.8	82	47	16.0	9.8
D. Blank	14	8	2.6	1.6	8	2	1.6	.4
E. No Response	6	64	1.1	12.5	3	46	.6	9.6
34. Some people can't do anything well.								
A. Agree	154	113	28.4	22.1	157	104	30.7	21.6
B. Disagree	295	266	54.3	52.0	284	271	55.6	56.3
C. Don't know	80	66	14.7	12.8	58	55	11.4	11.5
D. Blank	5	2	.9	.4	9	4	1.8	.8
E. No Response	9	65	1.7	12.7	3	47	.5	9.8
35. The subjects you study in school will help you get a job.								
A. Agree	387	368	71.3	71.9	381	357	74.6	74.2
B. Disagree	69	34	12.6	6.6	49	39	9.6	8.1
C. Don't know	70	39	12.9	7.6	73	38	14.3	7.9
D. Blank	8	6	1.5	1.2	4	1	.8	.2
E. No Response	9	65	1.7	12.7	4	46	.7	9.6
36. If you want to be a carpenter, which kind of school would you choose?								
A. University	76	45	14.0	8.8	44	36	8.6	7.5
B. Community College	93	65	17.1	12.7	108	60	21.1	12.5
C. Vocational-Technical School	201	192	37.0	37.5	201	214	39.3	44.6
D. Business College	161	144	29.7	28.1	154	123	30.2	25.6
E. No Response	12	66	2.2	12.9	4	48	.8	9.8

	CONTROL GROUP				TEST GROUP			
	Pre N	Post N	Pre %	Post %	Pre N	Post N	Pre %	Post %
37. To become a teacher, you must go to college about how many years?								
A. 2 years	82	27	15.1	5.3	60	34	11.7	7.1
B. 4 years	248	232	45.7	45.2	269	238	52.6	49.5
C. 6 years	133	117	24.5	22.9	126	106	24.7	22.0
D. 8 years	72	71	13.2	13.9	56	54	11.0	11.2
E. No Response	8	65	1.5	12.7	-	49	-	10.2
38. Which of the following is most important to you in deciding on an occupation?								
A. If you make enough money	152	101	28.0	19.7	127	87	24.9	18.1
B. If you like to work	236	260	43.5	50.8	257	274	50.2	56.9
C. If you can advance to a higher position	79	49	14.5	9.6	74	35	14.5	7.3
D. If the geographic location is to your liking	67	36	12.3	7.0	52	36	10.2	7.5
E. No Response	9	66	1.7	12.9	1	49	.2	10.2
39. Which is the most important when you apply for a job?								
A. Education	242	220	44.6	43.0	225	212	44.0	44.1
B. Job Experience	183	138	33.7	27.0	171	142	33.5	29.5
C. Appearance	45	27	8.3	5.2	47	29	9.2	6.0
D. Personality	60	57	11.0	11.1	65	51	12.7	10.6
E. No Response	13	70	2.4	13.7	3	47	.6	9.8
40. Most often, occupation decisions are based upon which of the following?								
A. Your ability	180	189	33.1	36.9	213	189	41.6	39.3
B. Your Interest	199	169	36.7	33.0	171	154	33.5	32.0
C. Your Physical Condition	105	63	19.3	12.3	73	52	14.3	10.8
D. Your Parent's Occupation	46	20	8.5	3.9	51	36	10.0	7.5
E. No Response	13	71	2.4	13.9	3	50	.6	10.4

	CONTROL GROUP				TEST GROUP			
	Pre N	Post N	Pre %	Post %	Pre N	Post N	Pre %	Post %
41. How is the best way to learn about different occupations?								
A. Talk to Parents	93	55	17.1	10.7	60	64	11.7	13.3
B. Read about them	152	107	28.0	20.9	136	89	26.6	18.5
C. Visit Employers	185	194	34.1	37.9	210	200	41.1	41.6
D. Discuss it in school	102	88	18.8	17.2	97	80	19.0	16.6
E. No Response	11	68	2.0	13.3	8	48	1.6	10.0
42. Which is most important in deciding whether you should go to college?								
A. How well you like school	87	55	16.0	10.7	85	52	16.6	10.8
B. Your Parent's Wishes	88	59	16.2	11.6	80	39	15.7	8.1
C. Your Occupation Interest	254	247	46.8	48.2	260	257	50.9	53.4
D. Grades	105	83	19.3	16.2	82	86	16.0	17.9
E. No Response	9	68	1.7	13.3	4	47	.8	9.8
43. To get ready for an occupation, you might attend which of the following?								
A. Vocational-Technical School	84	52	15 5	10.2	72	67	14.1	13.9
B. Community College	141	80	26.0	15.6	115	74	22.5	15.4
C. University	182	148	33.5	28.9	180	138	35.2	28.7
D. All of the above	127	163	23.3	31.8	143	154	28.0	32.0
E. No Response	9	69	1.7	13.5	1	48	.2	10.0
44. When should people decide upon an occupation?								
A. When they are in elementary school	105	78	19.3	15.2	91	69	17.8	14.3
B. When they are in junior high school	78	75	14.4	14.7	89	66	17.4	13.7
C. When they are in high school	190	186	35.0	36.3	168	164	32.9	34.1
D. When they leave high school	155	104	28.5	20.3	158	133	30.9	27.7
E. No Response	15	69	2.8	13.5	5	49	1.0	10.2
45. Which of the following is a way of preparing for work?								
A. Get on-the-job experience	108	83	19.9	16.2	124	90	24.3	18.7
B. Attend High School	64	41	11.8	8.0	49	35	9.6	7.3
C. Attend College	183	117	33.7	22.9	163	92	31.9	19.1
D. All of the Above	174	202	32.0	39.5	170	215	33.2	44.7
E. No Response	14	69	2.6	13.4	5	49	1.0	10.2

Test 5 - All Regions

	CONTROL GROUP				TEST GROUP			
	Pre N	Post N	Pre %	Post %	Pre N	Post N	Pre %	Post %
1. A pharmacist...								
A. Develops new techniques for farming	23	12	3.2	1.6	22	15	3.2	2.1
B. Examines eyes and prescribes optical wear	16	25	2.2	3.3	19	13	2.8	1.8
C. Prescribes and administers drugs and medicine	227	198	31.5	26.3	183	140	26.9	19.7
D. Prepares and dispenses drugs and medicine	452	431	62.7	57.2	452	440	66.5	62.0
E. No Response	3	87	.4	11.6	4	102	.6	14.4
2. A landscape architect...								
A. Designs the exterior of school buildings	25	24	3.5	3.2	19	15	2.8	2.1
B. Draws city and county zoning maps	85	69	11.8	9.2	84	70	12.4	9.9
C. Manages all types of earthmoving equipment	50	37	6.9	4.9	36	28	5.3	3.9
D. Designs the layout of outdoor areas	557	532	77.3	70.7	535	495	78.7	69.7
E. No Response	4	91	.6	12.1	6	102	.9	14.4
3. An auto mechanic primarily...								
A. Works with people	8	25	1.1	3.3	12	7	1.8	1.0
B. Works with tools and machines	682	623	94.6	82.7	645	594	94.9	83.7
C. Works with records	16	12	2.2	1.6	14	6	2.1	.8
D. Works with finances	12	5	1.7	.7	8	2	1.2	.3
E. No Response	3	88	.4	11.7	1	101	.1	14.2
4. A certified public accountant...								
A. Grants marriage certificates or licenses	78	55	10.8	7.3	75	71	11.0	10.0
B. Certifies people for receiving Medicare	51	54	7.1	7.2	27	28	4.0	3.9
C. Completes and checks business records	555	533	77.0	70.8	550	482	80.9	67.9
D. Does product advertising	33	19	4.6	2.5	22	27	3.2	3.8
E. No Response	4	92	.6	12.2	6	102	.9	14.4

q-1

	CONTROL GROUP				TEST GROUP			
	Pre N	Post N	Pre %	Post %	Pre N	Post N	Pre %	Post %
5. A marine biologist...								
A. Analyzes water samples for aquatic specimens	377	391	52.3	51.9	388	368	57.1	51.8
B. Analyzes water area for offshore oil drilling	45	33	6.2	4.4	32	35	4.7	4.9
C. Is a biologist for the U.S. Marine Corps	131	92	18.2	12.2	100	85	14.7	12.0
D. Charter underwater geological formation	163	148	22.6	19.7	157	119	23.1	16.8
E. No Response	5	89	.7	11.8	3	103	.4	14.5
6. Which occupation does not work primarily with people?								
A. Sales clerk	25	27	3.5	3.6	17	12	2.5	1.7
B. Elementary school teacher	27	11	3.7	1.5	23	9	3.4	1.3
C. Religious Worker	93	71	12.9	9.4	71	49	10.4	6.9
D. File Clerk	574	555	79.6	73.7	563	536	82.8	75.5
E. No Response	2	89	.3	11.8	6	104	.9	14.6
7. Which occupation would not be associated with government employment?								
A. Food Inspector	22	25	3.1	3.3	20	16	2.9	2.3
B. Meat Inspector	33	33	4.6	4.4	28	16	4.1	2.3
C. Clothing Inspector	555	507	77.0	67.3	528	504	77.6	71.0
D. Safety Inspector	107	101	14.8	13.4	100	71	14.7	10.0
E. No Response	4	87	.6	11.6	4	103	.6	14.5
8. Which occupation would not be associated with environmental activities?								
A. Exhaust emission inspector	157	108	21.8	14.3	137	118	20.1	16.6
B. Meteorologist	88	96	12.2	12.7	98	65	14.4	9.2
C. Geologist	51	44	7.1	5.8	42	36	6.2	5.1
D. Numismatist	419	417	58.1	55.4	400	386	58.8	54.4
E. No Response	6	88	.8	11.7	3	105	.4	14.8

	CONTROL GROUP				TEST GROUP			
	Pre N	Post N	Pre %	Post %	Pre N	Post N	Pre %	Post %
9. A construction riveter does not generally...								
A. Work outside	78	41	10.8	5.4	73	48	10.7	6.8
B. Work above ground level	146	103	20.2	13.7	124	110	18.2	15.5
C. Work in rural areas	315	350	43.7	46.5	303	294	44.6	41.4
D. Work in industrial settings	176	171	24.4	22.7	177	155	26.0	21.8
E. No Response	6	88	.8	11.7	3	103	.4	14.5
10. Which characteristic is not associated with professional athletics?								
A. Year-round employment	311	349	43.1	46.3	323	311	47.5	43.8
B. Considerable travel	75	53	10.4	7.0	65	43	9.6	6.1
C. Limited opportunities for employment	203	157	28.2	20.8	186	163	27.4	23.0
D. Limited years at earning power	124	107	17.2	14.2	100	90	14.7	12.7
E. No Response	8	87	1.1	11.6	6	103	.9	14.5
11. Repaired furniture and other types of woodworking								
A. No Experience	408	289	56.6	38.4	357	287	52.5	40.4
B. Limited Experience	230	293	32.0	38.9	240	245	35.3	34.5
C. Considerable Experience	76	81	10.5	10.8	77	75	11.3	10.6
D. Blank	3	2	.4	.3	3	1	.4	.1
E. No Response	4	88	.6	11.7	3	102	.4	14.4
12. Fixed mechanical things around the house and garage								
A. No Experience	311	255	43.1	33.9	292	245	42.9	34.5
B. Limited Experience	283	269	39.3	35.7	272	239	40.0	33.7
C. Considerable Experience	120	141	16.6	18.7	112	120	16.5	16.9
D. Blank	3	1	.4	.1	2	5	.3	.7
E. No Response	4	87	.6	11.6	2	101	.3	14.2

Q-3

	CONTROL GROUP				TEST GROUP			
	Pre N	Post N	Pre %	Post %	Pre N	Post N	Pre %	Post %
13. Worked with elderly or sick people								
A. No Experience	351	289	48.7	38.4	355	296	52.2	41.7
B. Limited Experience	240	253	33.3	33.6	227	219	33.4	30.8
C. Considerable Experience	125	122	17.3	16.2	89	90	13.1	12.7
D. Blank	3	2	.4	.3	4	4	.6	.6
E. No Response	2	87	.3	11.6	5	101	.7	14.2
14. Worked with young children								
A. No Experience	171	137	23.7	18.2	161	122	23.7	17.2
B. Limited Experience	247	237	34.3	31.5	257	232	37.8	32.7
C. Considerable Experience	295	280	40.9	37.2	254	244	37.4	34.4
D. Blank	4	12	.6	1.6	5	9	.7	1.3
E. No Response	4	87	.6	11.6	3	103	.4	14.5
15. Had a regular paying job for three months or more								
A. No Experience	301	266	41.7	35.3	278	255	40.9	35.9
B. Limited Experience	142	147	19.7	19.5	130	106	19.1	14.9
C. Considerable Experience	268	242	37.2	32.1	261	241	38.4	33.9
D. Blank	6	10	.8	1.3	6	6	.9	.8
E. No Response	4	88	.6	11.7	5	102	.7	14.4
16. Engaged in promotional or sales activities								
A. No Experience	344	289	47.7	38.4	279	237	41.0	33.4
B. Limited Experience	236	260	32.7	34.5	259	229	38.1	32.3
C. Considerable Experience	137	117	19.0	15.5	136	140	20.0	19.7
D. Blank	2	0	.3	0	2	3	.3	.4
E. No Response	2	87	.3	11.6	4	101	.6	14.2

	CONTROL GROUP				TEST GROUP			
	Pre N	Post N	Pre %	Post %	Pre N	Post N	Pre %	Post %
17. Performed secretarial or clerical responsibilities								
A. No Experience	477	404	66.2	53.7	447	376	65.7	53.0
B. Limited Experience	142	147	19.7	19.5	143	146	21.0	20.6
C. Considerable Experience	93	111	12.9	14.7	79	82	11.6	11.5
D. Blank	2	4	.3	.5	4	2	.6	.3
E. No Response	7	87	1.0	11.6	7	104	1.0	14.6
18. Did volunteer work								
A. No Experience	240	182	33.3	24.2	179	159	26.3	22.4
B. Limited Experience	297	288	41.3	38.2	301	277	44.3	39.0
C. Considerable Experience	176	183	24.4	24.3	189	167	27.8	23.5
D. Blank	5	13	.7	1.7	4	5	.6	.7
E. No Response	3	87	.4	11.6	7	102	1.0	14.4
19. Raised animals								
A. No Experience	157	111	21.8	14.7	137	120	20.1	16.9
B. Limited Experience	235	233	32.6	30.9	233	200	34.3	28.2
C. Considerable Experience	317	315	44.0	41.8	299	286	44.0	40.3
D. Blank	9	7	1.2	.9	7	3	1.0	.4
E. No Response	3	87	.4	11.6	4	101	.6	14.2
20. Made drawings or designs								
A. No Experience	262	195	36.3	25.9	249	206	36.6	29.0
B. Limited Experience	280	280	38.8	37.2	248	244	36.5	34.4
C. Considerable Experience	171	178	23.7	23.6	174	157	25.6	22.1
D. Blank	5	12	.7	1.6	5	2	.7	.3
E. No Response	3	88	.4	11.7	4	101	.6	14.2

	CONTROL GROUP				TEST GROUP			
	Pre N	Post N	Pre %	Post %	Pre N	Post N	Pre %	Post %
21. Who devotes the greatest amount of time working with groups of people?								
A. Stenographer	55	50	7.6	6.6	61	45	9.0	6.3
B. Recreational director	553	528	76.7	70.1	522	497	76.8	70.0
C. Proofreader	71	52	9.8	6.9	47	31	6.9	4.4
D. Shipping Clerk	38	34	5.3	4.5	43	35	6.3	4.9
E. No Response	4	89	.6	11.8	7	102	1.0	14.4
22. In which job is the knowledge of English grammar most frequently used?								
A. Sign Painter	73	61	10.1	8.1	51	50	7.5	7.0
B. Secretary	559	519	77.5	68.9	515	493	75.7	69.4
C. Designer	39	40	5.4	5.3	50	30	7.4	4.3
D. Postal clerk	46	45	6.4	6.0	60	35	8.8	4.9
E. No Response	4	88	.6	11.7	4	102	.6	14.4
23. Which of the following jobs generally requires irregular working hours?								
A. Auto Mechanics	61	62	8.5	8.2	78	37	11.5	5.2
B. Teacher	47	47	6.5	6.2	65	36	9.6	5.1
C. Beauty Operator	66	42	9.2	5.6	48	41	7.1	5.8
D. Newspaper Reporter	544	514	75.5	68.3	487	490	71.6	69.0
E. No Response	3	88	.4	11.7	2	106	.3	14.9
24. Which of the following jobs is physically the least dangerous?								
A. Medical Technician	613	561	85.0	74.5	582	532	85.6	74.9
B. Police Officer	48	51	6.7	6.8	39	24	5.7	3.4
C. Coal Miner	31	35	4.3	4.6	28	27	4.1	3.8
D. Steel Worker	24	19	3.3	2.5	26	23	3.8	3.3
E. No Response	5	87	.7	11.6	5	104	.7	14.6

	CONTROL GROUP				TEST GROUP			
	Pre N	Post N	Pre %	Post %	Pre N	Post N	Pre %	Post %
25. A successful mathematics student would have the best advantage in which of the following jobs?								
A. Librarian	55	49	7.6	6.5	29	37	4.3	5.2
B. Mechanical Engineer	433	461	60.0	61.2	426	423	62.6	59.6
C. Motel Operator	100	75	13.9	10.0	74	47	10.9	6.6
D. Sociologist	129	79	17.9	10.5	148	100	21.8	14.1
E. No Response	4	89	.6	11.8	3	103	.4	14.5
26. My first goal in order of importance to me is...								
A. Complete high school and find work	409	400	56.7	53.1	381	331	56.0	46.6
B. Complete a four-year college program	144	119	20.0	15.8	124	132	18.2	18.6
C. Complete a vocational-technical program	36	60	5.0	8.0	49	54	7.2	7.6
D. Complete a professional program of five or more years in college	69	55	9.6	7.3	84	63	12.4	8.9
E. No Response	63	119	8.7	15.8	42	130	6.2	18.3
27. My second goal in order of importance to me is...								
A. Complete high school and find work	68	93	9.4	12.4	54	73	7.9	10.3
B. Complete a four-year college program	253	235	35.1	31.2	237	205	34.9	28.9
C. Complete a vocational-technical program	190	193	26.4	25.6	207	193	30.4	27.2
D. Complete a professional program of five or more years in college	73	62	10.1	8.2	57	62	8.4	8.7
E. No Response	137	170	19.0	22.6	125	177	18.4	24.9
28. My third goal in order of importance to me is...								
A. Complete high school and find work	71	71	9.8	9.4	71	81	10.4	11.4
B. Complete a four-year college program	168	186	23.3	24.7	152	144	22.4	20.3
C. Complete a vocational-technical program	151	156	20.9	20.7	136	152	20.0	21.4
D. Complete a professional program of five or more years in college	93	91	12.9	12.1	92	74	13.5	10.4
E. No Response	238	249	33.0	33.1	229	259	33.7	36.5

	CONTROL GROUP				TEST GROUP			
	Pre N	Post N	Pre %	Post %	Pre N	Post N	Pre %	Post %
29. My fourth goal in order of importance to me is...								
A. Complete high school and find work	85	97	11.8	12.9	92	106	13.5	14.9
B. Complete a four-year college program	62	69	8.6	9.2	57	57	8.4	8.0
C. Complete a vocational-technical program	118	119	16.4	15.8	84	83	12.4	11.7
D. Complete a professional program of five or more years in college	163	194	22.6	25.8	157	161	23.1	22.7
E. No Response	293	274	40.6	36.4	290	303	42.6	42.7
30. My fifth goal in order of importance to me is...								
A. Complete high school and find work	95	87	13.2	11.6	79	99	11.6	13.9
B. Complete a four-year college program	43	49	6.0	6.5	47	43	6.9	6.1
C. Complete a vocational-technical program	66	82	9.2	10.9	55	47	8.0	6.6
D. Complete a professional program of five or more years in college	136	168	18.9	22.3	101	97	14.9	13.7
E. No Response	381	367	52.8	48.7	398	424	58.5	59.7
31. Secondary school instruction should be established on the basis of student career interests.								
A. Strongly Agree	160	163	22.2	21.6	171	177	25.1	24.9
B. Agree	450	413	62.4	54.8	412	353	60.6	49.7
C. Disagree	89	78	12.3	10.4	76	63	11.2	8.9
D. Strongly Disagree	19	11	2.6	1.5	15	11	2.2	1.6
E. No Response	3	88	.4	11.7	6	106	.9	14.9
32. Schools provide students with ample occupational information for career planning.								
A. Strongly Agree	140	120	19.4	15.9	153	122	22.5	17.2
B. Agree	324	328	44.9	43.6	321	292	47.2	41.1
C. Disagree	212	174	29.4	23.1	153	155	22.5	21.8
D. Strongly Agree	40	43	5.5	5.7	49	39	7.2	5.5
E. No Response	5	88	.7	11.7	4	102	.6	14.4

	CONTROL GROUP				TEST GROUP			
	Pre N	Post N	Pre %	Post %	Pre N	Post N	Pre %	Post %
33. Placement in jobs is a responsibility of the schools for all students.								
A. Strongly Agree	114	71	15.8	9.4	78	51	11.5	7.2
B. Agree	352	182	48.8	24.2	162	140	23.8	19.7
C. Disagree	191	305	26.5	40.5	325	286	47.8	40.3
D. Strongly Disagree	55	107	7.6	14.2	110	128	16.2	18.0
E. No Response	9	88	1.2	11.7	5	105	.7	14.8
34. Choosing appropriate career goals is a natural outgrowth of the student's school program.								
A. Strongly Agree	95	109	13.2	14.5	109	92	16.0	13.0
B. Agree	320	388	44.4	51.5	344	315	50.6	44.4
C. Disagree	213	133	29.5	17.7	172	162	25.3	22.8
D. Strongly Disagree	83	35	11.5	4.6	51	37	7.5	5.2
E. No Response	10	88	1.4	11.7	4	104	.6	14.6
35. Effective career education could be emphasized with little change in methods of instruction used by teachers.								
A. Strongly Agree	95	100	13.2	13.3	104	82	15.3	11.5
B. Agree	320	314	44.4	41.7	306	274	45.0	38.6
C. Disagree	213	200	29.5	26.6	201	185	29.6	26.0
D. Strongly Disagree	83	48	11.5	6.4	60	60	8.8	8.5
E. No Response	10	91	1.4	12.1	9	109	1.3	15.4
36. Career information should be provided to all students, regardless of career goals.								
A. Strongly Agree	299	303	41.5	40.2	288	280	42.4	39.4
B. Agree	273	257	37.9	34.1	273	256	40.1	36.1
C. Disagree	92	80	12.8	10.6	89	48	13.1	6.8
D. Strongly Disagree	50	26	6.9	3.5	25	22	3.7	3.1
E. No Response	7	87	1.0	11.6	5	104	.7	14.6

	CONTROL GROUP				TEST GROUP			
	Pre N	Post N	Pre %	Post %	Pre N	Post N	Pre %	Post %
37. Schools are not doing an adequate job of preparing students for the world of work.								
A. Strongly Agree	123	106	17.1	14.1	104	89	15.3	12.5
B. Agree	219	237	30.4	31.5	211	209	31.0	29.4
C. Disagree	315	275	43.7	36.5	286	238	42.1	33.5
D. Strongly Disagree	56	43	7.8	5.7	75	67	11.0	9.4
E. No Response	8	92	1.1	12.2	4	107	.6	15.2
38. You can be happy and have a successful life even if you don't like the career in which you are engaged.								
A. Strongly Agree	48	39	6.7	5.2	35	34	5.1	4.8
B. Agree	129	86	17.9	11.4	108	72	15.9	10.2
C. Disagree	217	224	30.1	29.7	212	172	31.2	24.2
D. Strongly Disagree	321	315	44.5	41.8	322	329	47.4	46.3
E. No Response	6	89	.8	11.8	3	103	.4	14.5
39. School makes a positive contribution in helping students gain an appreciation of the value and importance of work.								
A. Strongly Agree	101	86	14	11.4	99	81	14.6	11.4
B. Agree	387	359	53.7	47.7	366	336	53.8	47.3
C. Disagree	177	169	24.5	22.4	156	155	22.9	21.8
D. Strongly Disagree	48	46	6.7	6.1	53	33	7.8	4.7
E. No Response	8	93	1.1	12.4	6	105	.9	14.8
40. School is instrumental in helping students decide upon careers.								
A. Strongly Agree	88	79	12.2	10.5	80	82	11.8	11.5
B. Agree	397	370	55.1	49.1	394	364	57.9	51.3
C. Disagree	185	170	25.7	22.6	145	129	21.3	18.2
D. Strongly Disagree	42	41	5.8	5.4	54	29	7.9	4.1
E. No Response	9	93	1.2	12.4	7	106	1.0	14.9

	CONTROL GROUP				TEST GROUP			
	Pre N	Post N	Pre %	Post %	Pre N	Post N	Pre %	Post %
41. School helps students understand how important careers are in making a better society.								
A. Strongly Agree	112	91	15.5	12.1	113	86	16.6	12.1
B. Agree	371	363	51.5	48.2	378	335	55.6	47.2
C. Disagree	203	181	28.2	24.0	144	161	21.2	22.7
D. Strongly Disagree	29	30	4.0	4.0	43	25	6.3	3.5
E. No Response	6	88	.8	11.7	2	103	.3	14.5
42. School helps instill a desire in students to explore and evaluate various job potentials and future career opportunities.								
A. Strongly Agree	83	70	11.5	9.3	76	60	11.2	8.5
B. Agree	386	355	53.5	47.1	382	370	56.2	52.1
C. Disagree	206	205	28.6	27.2	179	152	26.3	21.4
D. Strongly Disagree	36	29	5.0	3.9	38	24	5.6	3.4
E. No Response	10	94	1.4	12.5	5	104	.7	14.6
43. If you don't like to work in a particular career, the solution is to change occupations.								
A. Strongly Agree	214	197	29.7	26.2	195	180	28.7	25.4
B. Agree	365	329	50.6	43.7	344	311	50.6	43.8
C. Disagree	102	100	14.1	13.3	110	88	16.2	12.4
D. Strongly Disagree	31	36	4.3	4.8	26	27	3.8	3.8
E. No Response	9	91	1.2	12.1	5	104	.7	14.6
44. Success in a career depends upon the attitude a person might have toward work in that career.								
A. Strongly Agree	400	361	55.5	47.9	370	370	54.4	52.2
B. Agree	234	239	32.5	31.7	248	192	36.5	27.0
C. Disagree	51	47	7.1	6.2	39	32	5.7	4.5
D. Strongly Disagree	30	18	4.2	2.4	18	13	2.6	1.8
E. No Response	6	88	.8	11.7	5	103	.7	14.5

	CONTROL GROUP				TEST GROUP			
	Pre N	Post N	Pre %	Post %	Pre N	Post N	Pre %	Post %
45. It is difficult to learn an occupation without having actual work experience in that occupation.								
A. Strongly Agree	182	163	25.2	21.6	184	163	27.1	23.0
B. Agree	293	282	40.6	37.5	278	260	40.9	36.6
C. Disagree	185	171	25.7	22.7	179	148	26.3	20.8
D. Strongly Disagree	53	49	7.4	6.5	36	36	5.3	5.1
E. No Response	8	88	1.1	11.7	3	103	.4	14.5

PART I

PARENT QUESTIONNAIRE

	MOTHER N	MOTHER %	FATHER N	FATHER %
1. Visits to school by someone who uses math in their work would create more interests in the subject of mathematics.				
A. Strongly Agree	23	16	27	20
B. Agree	71	50	64	49
C. Undecided	24	17	11	8
D. Disagree	9	6	3	2
E. Strongly Disagree	0	0	4	3
F. No Response	13	9	20	15
2. I think my own job is an important one.				
A. Strongly Agree	59	42	65	50
B. Agree	61	43	41	31
C. Undecided	6	4	1	1
D. Disagree	0	0	1	1
E. Strongly Disagree	0	0	0	0
F. No Response	14	10	21	16
3. I want our elementary child prepared so that when the time comes he or she can better decide how he or she wants to earn a living.				
A. Strongly Agree	77	55	52	40
B. Agree	45	32	50	38
C. Undecided	4	2	3	2
D. Disagree	1	1	2	1
E. Strongly Disagree	0	0	1	1
F. No Response	13	9	21	16
4. Students no not become interested in occupations until high school years.				
A. Strongly Agree	7	5	9	6
B. Agree	26	18	25	19
C. Undecided	17	12	14	10
D. Disagree	63	45	53	41
E. Strongly Disagree	14	10	7	5
F. No Response	13	9	21	16
5. I do not think my elementary age child benefits from school field trips.				
A. Strongly Agree	3	2	3	2
B. Agree	4	2	13	10
C. Undecided	16	11	14	10
D. Disagree	62	44	48	37
E. Strongly Disagree	41	29	30	23
F. No Response	14	10	20	15

		MOTHER N	MOTHER %	FATHER N	FATHER %
6.	Because the school is best suited to do the job, the parent should not be involved in helping students prepare for occupations.				
	A. Strongly Agree	3	2	4	3
	B. Agree	1	1	1	1
	C. Undecided	7	5	2	1
	D. Disagree	42	30	49	37
	E. Strongly Disagree	73	52	53	41
	F. No Response	14	10	20	15
7.	Elementary age children could learn a great deal by visiting the place where I work.				
	A. Strongly Agree	7	5	12	9
	B. Agree	48	34	45	34
	C. Undecided	39	27	32	24
	D. Disagree	25	17	18	13
	E. Strongly Disagree	2	1	0	0
	F. No Response	19	13	22	17
8.	Elementary schools should have workers such as mechanics, farmers, and doctors coming to school to talk about their jobs to students.				
	A. Strongly Agree	21	15	13	10
	B. Agree	69	49	58	44
	C. Undecided	22	15	15	11
	D. Disagree	14	10	21	16
	E. Strongly Disagree	0	0	1	1
	F. No Response	14	10	21	16
9.	I believe it is important for teachers to teach reading, writing, and arithmetic without starting a career education program.				
	A. Strongly Agree	15	10	30	23
	B. Agree	29	20	33	25
	C. Undecided	36	25	14	10
	D. Disagree	39	27	26	20
	E. Strongly Disagree	8	5	6	4
	F. No Response	13	9	20	15
10.	If schools were career-oriented they would be useful to more students.				
	A. Strongly Agree	8	5	13	10
	B. Agree	45	32	31	24
	C. Undecided	47	33	32	24
	D. Disagree	23	16	30	23
	E. Strongly Disagree	2	1	3	2
	F. No Response	15	10	20	15

		MOTHER N	MOTHER %	FATHER N	FATHER %
11.	Elementary school is too early for a student to start thinking about career possibilities.				
	A. Strongly Agree	7	5	9	6
	B. Agree	18	12	27	20
	C. Undecided	13	9	12	9
	D. Disagree	74	52	53	41
	E. Strongly Disagree	14	10	8	6
	F. No Response	14	10	20	15
12.	As a taxpayer, I believe our elementary school system is giving me my money's worth of education for my child.				
	A. Strongly Agree	5	3	6	4
	B. Agree	47	33	38	29
	C. Undecided	26	18	27	20
	D. Disagree	40	28	26	20
	E. Strongly Disagree	9	6	12	9
	F. No Response	13	9	20	15
13.	Most people in the community lack the knowledge and teaching experience necessary to make meaningful contribution to elementary classes.				
	A. Strongly Agree	3	2	4	3
	B. Agree	16	11	27	20
	C. Undecided	31	22	20	15
	D. Disagree	64	45	47	36
	E. Strongly Disagree	12	8	10	7
	F. No Response	14	10	21	16
14.	Every elementary school graduate should leave grade school knowing something about many different occupations.				
	A. Strongly Agree	22	15	24	18
	B. Agree	82	58	55	42
	C. Undecided	13	9	13	10
	D. Disagree	8	5	16	12
	E. Strongly Disagree	1	1	1	1
	F. No Response	14	10	20	15
15.	As a parent, I seem to teach my elementary age child more about occupations while he is at home than the teachers do while he is in school.				
	A. Strongly Agree	5	3	14	10
	B. Agree	29	20	43	33
	C. Undecided	54	38	38	29
	D. Disagree	37	26	11	8
	E. Strongly Disagree	1	1	1	1
	F. No Response	14	10	22	17

		MOTHER		FATHER	
		N	%	N	%
16.	Field trips to observe workers take too much time away from the regular school subjects my child should be learning.				
	A. Strongly Agree	0	0	2	1
	B. Agree	15	10	12	9
	C. Undecided	15	10	22	17
	D. Disagree	76	54	55	42
	E. Strongly Disagree	20	14	16	12
	F. No Response	14	10	22	17
17.	Local residents would be eager to visit schools to talk to students about their jobs.				
	A. Strongly Agree	3	2	8	6
	B. Agree	43	30	26	20
	C. Undecided	59	42	56	43
	D. Disagree	19	13	17	13
	E. Strongly Disagree	1	1	0	0
	F. No Response	15	10	22	17
18.	I think businessmen should be called upon frequently to serve as resource speakers in the elementary school classroom.				
	A. Strongly Agree	8	5	11	8
	B. Agree	64	45	34	26
	C. Undecided	32	22	39	30
	D. Disagree	18	12	21	16
	E. Strongly Disagree	4	2	2	1
	F. No Response	14	10	22	17
19.	Elementary school teachers should spend time helping children understand why people work.				
	A. Strongly Agree	20	14	23	17
	B. Agree	81	57	69	53
	C. Undecided	18	12	10	7
	D. Disagree	8	5	4	3
	E. Strongly Disagree	0	0	1	1
	F. No Response	13	9	22	17
20.	Field trips for elementary age school children to observe workers should be provided more often.				
	A. Strongly Agree	12	8	10	7
	B. Agree	66	47	46	35
	C. Undecided	32	22	33	25
	D. Disagree	17	12	15	11
	E. Strongly Disagree	0	0	3	2
	F. No Response	13	9	22	17

	MOTHER		FATHER	
	N	%	N	%
21. I really enjoy my own job.				
A. Strongly Agree	24	17	37	28
B. Agree	83	59	60	46
C. Undecided	16	11	9	6
D. Disagree	0	0	2	1
E. Strongly Disagree	0	0	0	0
F. No Response	17	12	21	16
22. In today's society, a college degree is almost a necessity to insure success.				
A. Strongly Agree	11	7	8	6
B. Agree	21	15	15	11
C. Undecided	10	7	8	6
D. Disagree	57	40	43	33
E. Strongly Disagree	28	20	34	26
F. No Response	13	9	21	16
23. Students of elementary school age should have some work experience at home.				
A. Strongly Agree	66	47	48	37
B. Agree	60	42	57	44
C. Undecided	0	0	2	1
D. Disagree	2	1	0	0
E. Strongly Disagree	0	0	0	0
F. No Response	12	8	22	17
24. I think the elementary school develops good work habits in my child.				
A. Strongly Agree	9	6	8	6
B. Agree	67	47	46	35
C. Undecided	30	21	30	23
D. Disagree	21	15	20	15
E. Strongly Disagree	0	0	4	3
F. No Response	13	9	21	16
25. Most subjects in my child's classroom are related to how it may be used in the world of work.				
A. Strongly Agree	6	4	6	4
B. Agree	46	32	31	24
C. Undecided	40	28	35	27
D. Disagree	31	22	32	24
E. Strongly Disagree	3	2	3	2
F. No Response	14	10	22	17

		MOTHER		FATHER	
		N	%	N	%
26.	The elementary school classes are designed in such a way that they waste a lot of my child's time.				
	A. Strongly Agree	3	2	4	3
	B. Agree	17	12	11	8
	C. Undecided	27	19	33	25
	D. Disagree	70	50	53	41
	E. Strongly Disagree	7	5	6	4
	F. No Response	16	11	22	17
27.	Most of our elementary teachers show their students how their school subjects relate to the kind of work I do.				
	A. Strongly Agree	0	0	3	2
	B. Agree	13	9	11	8
	C. Undecided	53	37	42	32
	D. Disagree	50	35	44	34
	E. Strongly Disagree	6	4	7	5
	F. No Response	18	12	22	17
28.	Elementary students should be told about different jobs and job requirements during the study of every subject.				
	A. Strongly Agree	10	7	11	8
	B. Agree	55	39	51	39
	C. Undecided	30	21	17	13
	D. Disagree	27	19	26	20
	E. Strongly Disagree	4	2	3	2
	F. No Response	14	10	21	16
29.	Generally, teachers do not have enough time to relate careers to what they teach.				
	A. Strongly Agree	8	5	5	3
	B. Agree	66	47	37	28
	C. Undecided	28	20	33	25
	D. Disagree	23	16	25	19
	E. Strongly Disagree	3	2	7	5
	F. No Response	12	8	22	17
30.	Elementary age children should learn that work is not more drudgery.				
	A. Strongly Agree	39	27	25	19
	B. Agree	82	58	74	57
	C. Undecided	2	1	2	1
	D. Disagree	5	3	6	4
	E. Strongly Disagree	0	0	0	0
	F. No Response	12	8	22	17

		MOTHER		FATHER	
		N	%	N	%
31.	Descriptive occupational brochures are the best means of providing students with information for making career choices.				
	A. Strongly Agree	3	2	4	3
	B. Agree	16	11	17	13
	C. Undecided	33	23	31	24
	D. Disagree	65	46	44	34
	E. Strongly Disagree	10	7	11	8
	F. No Response	13	9	22	17
32.	My elementary child should learn how to use leisure time.				
	A. Strongly Agree	28	20	28	21
	B. Agree	87	62	74	57
	C. Undecided	9	6	3	2
	D. Disagree	3	2	2	1
	E. Strongly Disagree	1	1	0	0
	F. No Response	12	8	22	17
33.	It is important that students be taught so that they have some idea of their own abilities.				
	A. Strongly Agree	48	34	40	31
	B. Agree	78	55	58	52
	C. Undecided	2	1	1	0
	D. Disagree	0	0	0	0
	E. Strongly Disagree	0	0	0	0
	F. No Response	12	8	20	15
34.	It is very important for elementary age students to learn about their "self".				
	A. Strongly Agree	49	35	33	25
	B. Agree	71	50	68	52
	C. Undecided	5	3	7	5
	D. Disagree	2	1	0	0
	E. Strongly Disagree	0	0	0	0
	F. No Response	13	9	21	16
35.	I hope my elementary age child learns that work is important.				
	A. Strongly Agree	78	55	45	34
	B. Agree	48	34	61	47
	C. Undecided	2	1	2	1
	D. Disagree	0	0	0	0
	E. Strongly Disagree	0	0	0	0
	F. No Response	12	8	21	16

		MOTHER		FATHER	
		N	%	N	%
36.	Career education activities seem to take too much time away from regular subjects.				
A.	Strongly Agree	3	2	5	3
B.	Agree	13	9	18	13
C.	Undecided	51	36	41	31
D.	Disagree	54	38	33	25
E.	Strongly Disagree	4	2	11	8
F.	No Response	15	10	21	16

PART II	MOTHER N	MOTHER %	FATHER N	FATHER %
1. Career Education is taught by my child's regular teacher.				
A. Strongly Agree	1	1	2	1
B. Agree	7	5	10	7
C. Undecided	78	55	63	48
D. Disagree	36	25	24	18
E. Strongly Disagree	1	1	7	5
F. No Response	17	12	23	17
2. I understand the concepts of Career Education well enough to explain it to someone else.				
A. Strongly Agree	1	1	2	1
B. Agree	12	8	24	18
C. Undecided	46	32	37	28
D. Disagree	57	40	36	27
E. Strongly Disagree	8	5	7	5
F. No Response	16	11	23	17
3. The purpose of Career Education is to lock children into an occupational choice.				
A. Strongly Agree	1	1	1	1
B. Agree	9	6	21	16
C. Undecided	30	21	25	19
D. Disagree	65	46	47	36
E. Strongly Disagree	18	12	12	9
F. No Response	17	12	23	17
4. Career Education is a separate subject.				
A. Strongly Agree	2	1	6	4
B. Agree	30	21	33	25
C. Undecided	47	33	29	22
D. Disagree	37	26	33	25
E. Strongly Disagree	7	5	6	3
F. No Response	17	12	23	17
5. Career Education is responsible for helping youngsters understand their self.				
A. Strongly Agree	7	5	8	6
B. Agree	59	42	48	37
C. Undecided	45	32	39	30
D. Disagree	11	7	10	7
E. Strongly Disagree	1	1	1	1
F. No Response	17	12	23	17

	MOTHER		FATHER	
	N	%	N	%
6. Use of leisure time is considered in Career Education.				
A. Strongly Agree	1	1	5	3
B. Agree	55	39	49	37
C. Undecided	59	42	43	33
D. Disagree	6	4	7	5
E. Strongly Disagree	1	1	2	1
F. No Response	18	12	23	17
7. I didn't know we had Career Education in our elementary school.				
A. Strongly Agree	5	3	3	2
B. Agree	72	51	51	39
C. Undecided	29	20	28	21
D. Disagree	15	10	17	13
E. Strongly Disagree	1	1	6	4
F. No Response	18	12	24	18
8. Career Education is another name for vocational education.				
A. Strongly Agree	0	0	2	1
B. Agree	61	36	48	37
C. Undecided	40	28	35	27
D. Disagree	28	20	19	14
E. Strongly Disagree	4	2	2	1
F. No Response	17	12	23	17
9. One purpose of Career Education is to discourage children from attending college.				
A. Strongly Agree	3	2	0	0
B. Agree	1	1	4	3
C. Undecided	22	15	14	10
D. Disagree	75	53	62	48
E. Strongly Disagree	22	15	26	20
F. No Response	17	12	23	17
10. One purpose of Career Education is to involve the community in the educational process.				
A. Strongly Agree	7	5	13	10
B. Agree	69	49	53	41
C. Undecided	38	27	29	22
D. Disagree	9	6	11	8
E. Strongly Disagree	0	0	0	0
F. No Response	17	12	23	17

		MOTHER		FATHER	
		N	%	N	%
11.	Career Education is designed to assist my child in making realistic career choices when the time comes.				
	A. Strongly Agree	21	15	18	13
	B. Agree	90	64	71	55
	C. Undecided	12	8	15	11
	D. Disagree	0	0	1	1
	E. Strongly Disagree	0	0	0	0
	F. No Response	17	12	24	18
12.	Career Education is supposed to make elementary children aware of occupations.				
	A. Strongly Agree	22	15	16	12
	B. Agree	82	58	71	55
	C. Undecided	19	13	14	10
	D. Disagree	0	0	3	2
	E. Strongly Disagree	0	0	1	1
	F. No Response	17	12	24	18